PERI INSTITUTE OF TECHNOLOGY

Approved by AICTE, Affiliated to Anna University
Accredited by NAAC | Recognized by UGC with 2(F)

Criteria 1

Criterion 1 – Curricular Aspects

Key Indicator- 1.2

1.2 Academic Flexibility

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. where the students of the institution have enrolled and successfully completed during the last five years)

IQAC
Committed to Excellence

PERI INSTITUTE OF TECHNOLOGY

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ACADEMIC YEAR 2022-2023

ADD ONCOURSE/WORK SHOP/CERTIFICATE COURSES

IQAC
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PERI
INSTITUTE OF TECHNOLOGY

28.01.2023

Chennai

From

The HOD-CIVIL,

Peri Institute of Technology

Mannivakkam,

Chennai-48

To

The Principal

PERI Institute of Technology

Chennai

Sir,

Sub: Approval to conduct a program on **CVA-012AutoCAD Course**– Reg

The department of Civil Engineeringis planning to conduct a program titled "**CVA-012AutoCAD Course**" training for Civil Engineering students. Kindly accord permission for conducting the program.

S.No.	Year	Scheduled Date	Time
1	II	04-02-2023 to 06-05-2023	1.15p.m-3.40p.m

Thanking You

Yours Truly

Recommended

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

28/01/23
Head of the Department
Department of Civil Engineering
PERI Institute of Technology,
Mannivakkam, Chennai - 600 048

HOD/CIVIL

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2022-2023

PERIIT /CIVILAdd onCourse/2022-2023/Even/01 **Date: 28.01.2023**

CIRCULAR

Department of Civil Engineering is planned to conduct a program titled "**CVA012-AutoCAD Course**" for the Academic Year 2022 – 2023 for CIVIL Engineering students directed to attend the program.

S.No.	Year	Scheduled Date	Time
1	II	04-02-2023 to 06-05-2023	1.15p.m-3.40p.m

Co-ordinator 28/1/23

28/01/23
Head of the Department
Dept. of Civil Engineering
PERI Institute of Technology,
Mannivakkam, Chennai - 600 048

Head of the Department

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members – Civil
5. Main – Notice Board

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSES -CVA-012 AutoCAD Course

Minutes of the Meeting held on 26.01.2023

Venue : HOD Room, Civil Department, Beta Block, PERI Institute of Technology
Date :26.01.2023
Time : 10:00am – 11:30am and 02.00 pm – 03.30 pm

Agenda of the Meeting:

1. Course and Faculty selection
2. Syllabus preparation
3. Tentative Timetable preparation
4. Assessment method discussion

Members Present:

1. Mr. B. Magesh, Vice Principal, PERI Institute of Technology
2. Mr. M. Pitchi Rajan, Head of the Department, Civil Engineering
3. Ms. C. Lavanya, VAC Coordinator, Civil Engineering
4. Ms. M. Kalaivani, Industrial Expert, L&T Construction, Chennai
5. Mr.Simon ,Trainer, CAD Centre

Ms. C. Lavanya, Add on Course.Coordinator welcomed and briefed the committee members about the meeting

Agenda Item 1: Course and Faculty selection

In the academic year 2023-24 odd semester, for second year students (2021-2025 batch) CVA-012 AutoCAD Course is selected based on the interest of students and the suggestion by Vice Principal, Head of the Department and Industry expert.

Agenda Item 2: Syllabus preparation

The syllabus is framed in accordance with the view to achieve the desired outcomes of the course. The courses similar to the selected course in the curriculum of UG and PG programmes offered by various IITs, NITs, Anna University and other Universities has been analysed and final syllabus is framed by the consultative committee members.

Agenda Item 3: Tentative Timetable preparation

The Timetable for VAC classes and Internal Assessment is prepared based on guidelines prescribed by Anna University. Total of 30 periods with 3 hours on Saturdays is decided and communicated to the Course faculty.

Agenda Item 4:Assessmentmethod

Two Internal assessments to be conducted one at the middle of the course and one at the end of the course is decided. Internal Assessment is decided to be conducted for AutoCAAD Drawing.Each Internal Assessment to be conducted for50 marks

Part A – AutoCAD Sketch

Coordinator 26/1/23

Senior Faculty Member

26/1/23
Industry Expert

Head of the Department
Department of Civil Engineering
PERI Institute of Technology
Mannivakkam, Chennai - 600 048

Principal

Dr. R. PALSON KENNEDY, M.E.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

AutoCAD

SYLLABUS MANUAL

CADD SCHOOL

Head of the Department
Department of Civil Engineering
Institute of Technology,
Madhivakkam, Chennai-600 048

HOUR -1

- Need for Designing
- Introduction to CAD/CAM/CAE
- Concept of Designing and Drafting
- Angle of projections
- First angle projection
- Third angle projection
- Orthographic and Isometric views
- Quadrants
- Basic Drafting rules
- Introduction to AutoCAD
- Introduction to Autodesk

HOUR -2

COORDINATE SYSTEMS

- Absolute co-ordinate system
    a. Absolute origin
    b. Cartesian coordinates
- Relative methods
    - Relative Rectangular method
        - Concept of using @ symbol
        - Syntax
    - Relative Polar method
        - Syntax
        - Angle calculation in four quadrants

HOUR -3

AUTOCAD BASICS

- Workspace
- Ribbon bar (RIBBON)
- Command line (CTRL+9/CLI)
- Menu bar
- Function keys

- ❖ Tangent, Tangent, Radius (Ttr)
- ❖ Tangent, Tangent, Tangent

➢ Polygon (POL)

- ❖ Center
  - Inscribed (I)
  - Circumscribed (C)
- ❖ Edge (E)

➢ Erase (E)

➢ Copy (CO)

- ❖ Displacement (D)
- ❖ Mode (O)

➢ Move (M)

- ❖ Base point
- ❖ Displacement (D)

HOUR -5

➢ Rectangle (REC)

- ❖ Chamfer (C)
- ❖ Elevation (E)
- ❖ Fillet (F)
- ❖ Thickness (T)
- ❖ Width (W)
- ❖ Area
- ❖ Dimension
- ❖ Rotation

➢ Chamfer (CHA)

- ❖ Undo (U)
- ❖ Polyline (P)
- ❖ Distance (D)
- ❖ Angle (A)
- ❖ Trim (T)
- ❖ Method (E)
- ❖ Multiple (M)

- Start, Center, End
- Start, Center, Angle
- Start, Center, Length
- Start, End, Angle
- Start, End, Direction
- Start, End, Radius
- Center, Start, End
- Center, Start, Angle
- Center, Start, Length
- Continue

➢ Array (AR)

- Rectangular Array (ARRAYRECT)
  - Associative (AS)
  - Base point (B)
  - Count (C)
  - Spacing (S)
  - Columns (C)
  - Rows (R)
  - Levels (L)
  - Exit (X)
- Polar Array (ARRAYPOLAR)
  - Associative (AS)
  - Base point (B)
  - Items (I)
  - Angle between (A)
  - Fill (F)
  - Rows (R)
  - Levels (L)
  - Rotate (ROT)
  - exit (X)
- Path Array (ARRAYPATH)
  - Associative (AS)
  - Base point (B)

- ❖ Reference (R)

- Donut (DO)
- Fill (FILL)
- Regeneration mode (RE)
- Multiline (ML)
  - ❖ Justification (J)
  - ❖ Scale (S)
  - ❖ Style (ST)
    - Top (T)
    - Zero (Z)
    - Bottom (B)
- Multiline Style (MLSTYLE)
- Multiline Edit (MLEDIT)
  - ❖ Cross intersection
    - Closed cross (CC)
    - Open cross (OC)
    - Merged cross (MC)
  - ❖ Tee intersection
    - Closed Tee (CT)
    - Open Tee (OT)
    - Merged Tee (MT)
  - ❖ Corner Joint (CJ)
  - ❖ Adding vertices (AV) & Deleting Vertices (DV)
  - ❖ Cutting and Welding Multiple
    - Cut single (CS)
    - Cut all (CA)
    - Weld all (WA)

HOUR -9

- Spline (SPL)
  - ❖ Methods (M)
  - ❖ Knots (K)
  - ❖ Object (O)

- Write block (W)
  - Base point
  - Object
- Trim (TR)
  - Fence (F)
  - Crossing (C)
  - Project (P)
    - None
    - UCS
    - View
  - Edge (E)
    - Extend
    - No Extend
  - Erase (R)
  - Undo (U)
- Extend (EX)
  - Fence (F)
  - Crossing (C)
  - Project (P)
    - None
    - UCS
    - View
  - Edge (E)
    - Extend
    - No extend
  - Undo (U)

HOUR -11

- Dimensioning concepts
- Need for Dimensioning
- Fundamental dimensioning terms
  - Dimension line
  - Dimension text

- Rotated (R)

- Aligned Dimension (DAL)
  - M text (M)
  - Text (T)
  - Angle (A)

HOUR -13

- Arc Length (DAR)
  - M text (M)
  - Text (T)
  - Angle (A)
  - Partial (P)
  - Leader (L)
- Baseline Dimension (DBA)
- Continuous Dimension (DCO)
- Angular Dimension (DAN)
- Diameter Dimension (DDI)
  - M text (M)
  - Text (T)
  - Angle (A)
- Radius Dimension (DRA)
  - M text (M)
  - Text (T)
  - Angle (A)
- Jogged Dimension (DJO)
  - M text (M)
  - Text (T)
  - Angle (A)
- Ordinate Dimension (DOR)
  - X datum (X)
  - Y datum (Y)
  - M text (M)
  - Text (T)
  - Angle (A)

- Right (R)
- Align (A)
- Middle (M)
- Fit (F)
- Top Left (TL)
- Top Center (TC)
- Top Right (TR)
- Middle Left (ML)
- Middle Center (MC)
- Middle Right (MR)
- Bottom Left (BL)
- Bottom Center (BC)
- Bottom Right (BR)

❖ Style (S)

➢ Mtext (MT)

❖ Height (H)
❖ Justify (J)
❖ Line Spacing (L)
❖ Rotation (R)
❖ Style (S)
❖ Width (W)
❖ Columns (C)

➢ Mtedit (MTED)
➢ Text edit (DTED)

❖ Home (H)
❖ New (N)
❖ Rotate (R)
❖ Oblique (O)

➢ Multileader (MLEADER)
➢ Multileader edit (MLE)
➢ Multileader collect(MLC)
➢ Multileader align(MLA)
➢ Multileader style (MLS)

HOUR -20

- Attributes (ATT)
- External reference (XR)
- Page Setup Manager
- Plot (Ctrl+P)
- Sheet set(SSM)

HOUR -21

- Export(EXP)
- Options (OP)
- Image(IM)
- Imageadjust
- Imageattach
- Imageclip
- Imagequality
- Imageframe
- Title block creation

HOUR -22

- Isometric views
- Isoplane change
- Ellipse(EL)
    - Isocircle
- Isometric practice

HOUR -23

3D-MODELING

- Introduction to AutoCAD 3d
- Starting three dimensional modelling in AutoCAD
- Use of three dimensional drawing
- Types of 3d models
- Wireframe models
- Surface models

- Helix
- Presspull
- Sweep
- Revolve
- Loft

HOUR -26

3D Operations

- 3D Move
- 3D Rotate
- 3D Align
- 3D Array
  - Rectangular array
  - Polar array
- 3D Mirror
- Slice
- Thicken
- Convert to Surface
- Convert to solids
- Extract edges

HOUR -27

Solid Editing

- Union
- Subtract
- Intersect
- Extrude faces
- Move faces
- Offset faces
- Rotate faces
- Taper faces
- Copy faces
- Color faces

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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE-TIME TABLE

AutoCAD Course

S.No	Date	Hours	Topics
1	04-02-2023	6,7,8	**Need for Designing** □ Introduction to CAD/CAM/CAE □ Concept of Designing and Drafting □ Angle of projections □ First angle projection ,Third angle projection ,Orthographic and Isometric views , Quadrants □ Basic Drafting rules Introduction to AutoCAD □ Introduction to Autocad,**COORDINATE SYSTEMS** Absolute co-ordinate system a. Absolute origin b. Cartesian coordinates □ Relative methods □ Relative Rectangular method ,Concept of using @ symbol Syntax □ Relative Polar method □ Syntax □ Angle calculation in four quadrants,**AUTOCAD BASICS**,Workspace,Ribbon bar (RIBBON) □ Command line (CTRL+9/CLI) □ Menu bar □ Function key,□ Units (UN) □ Limits □ Line (L) □ Close (C) □ Undo (U) □ Ray - Line (RAY) □ Xline (XL) □ Horizontal (H) □ Vertical (V) □ Angle (A) □ Bisect (B) □ Offset (O) □ Polyline (PL) □ Arc (A) □ Halfwidth (H) Length (L) □ Undo (U) □ Width (W)
2	11-02-2023	6,7,8	**Polyline edit (PEdit)** □ Close (C) □ Open (O) □ Join (J) □ Fit (F) □ Spline (S) Reverse (R) □ Undo (U) □ Edit vertex (E) □ **Circle (C)** Center, Radius (R) □ Center, Diameter (D) □ 2 Points (2P) □ 3 Points (3P) Tangent, Tangent, Radius (Ttr) □ Tangent, Tangent, Tangent □ **Polygon (POL)** □ Center □ Inscribed (I) Circumscribed (C) □ Edge (E) □ **Erase (E)** □ **Copy (CO)** □ Displacement (D) Mode (O) **Move (M)** □ Base point □ Displacement,**Rectangle (REC)** □ Chamfer (C) □ Elevation (E) □ Fillet (F) □ Thickness (T) □ Width (W) □ Area □ Dimension □ Rotation □ **Chamfer (CHA)** □ Undo (U) □ Polyline (P) □ Distance (D) □ Angle (A) □ Trim (T) □ Method (E) □ Multiple (M)**Fillet (F)** □ Undo (U) □ Polyline (P) □ Radius (R) □ Trim (T) □ Multiple (M) **Properties (PR)** □ **Line properties** □ **Match properties** □ Object □ Settings ,Layers □ **Layer (LA)** □ Layer current (LAYCUR) □ Layer delete (LAYDEL) □ Layer close (LAYERCLOSE) □ Layer freeze (LAYFRZ) □ Layer thaw (LAYTHW) □ Layer isolated (LAYISO) □ Layer unisolated (LAYUNISO) □ Layer lock (LAYLCK) □ Layer unlock (LAYULK) Layer match (LAYMCH) □ Layer merge (LAYMRG) □ Layer on (LAYON) □ Layer off (LAYOFF) □ Layer walk (LAYWALK) ,Copy to layer
3	18-02-2023	6,7,8	**Arc (A)** □ 3 point□ Start, Center, End □ Start, Center, Angle □ Start, Center, Length □ Start, End, Angle □ Start, End, Direction □ Start, End, Radius □ Center, Start, End □ Center, Start, Angle □ Center, Start, Length Continue □ **Array (AR)** □ **Rectangular Array (ARRAYRECT)** □ Associative (AS) □ Base point (B) □ Count (C) Spacing (S) □ Columns (C) □ Rows (R) □ Levels (L) □ Exit (X) □ **Polar Array (ARRAYPOLAR)** □ Associative (AS) □ Base point (B) Items (I) □ Angle between (A) □ Fill (F) □ Rows (R) □ Levels (L) □ Rotate (ROT) exit (X) □ **Path Array (ARRAYPATH)** □ Associative (AS),□ Items (I) Levels (L) □ Z- Direction □ Method Tangent direction □ Rows (R) □ Align items, Exit (X) □ **Arrayedit (ARRAYEDIT)** □ Source (S) □ Replace (REP) □ Method □ Base point (B) □ Items (I) □ Rows (R) □ Levels (L) □ Z-DirectionReset (R) □ Exit (X) □ -Array (-ARRAY) □ **Array classic c (ARRAYCLASSIC)**□ **Mirror (MI)** □ **Rotate (RO)** □ Copy (C) □ Reference (R) □ Offset (O) □ Through (T) □ Erase (E) □ Layer (L) □ **Scale (SC)** □ Copy ,□ Reference (R) □ **Donut (DO)** □ **Fill (FILL)** □ **Regeneration mode (RE)** □ **Multiline (ML)** □ Justification (J) Scale (S) □ Style (ST) □ Top (T) □ Zero (Z) □ Bottom (B) □ Multiline Style (MLSTYLE) □ **Multiline Edit (MLEDIT)** □ Cross intersection □ Closed cross (CC) □ Open cross (OC) □ Merged cross (MC) □ Tee intersection □ Closed Tee (CT) □ Open Tee (OT) □

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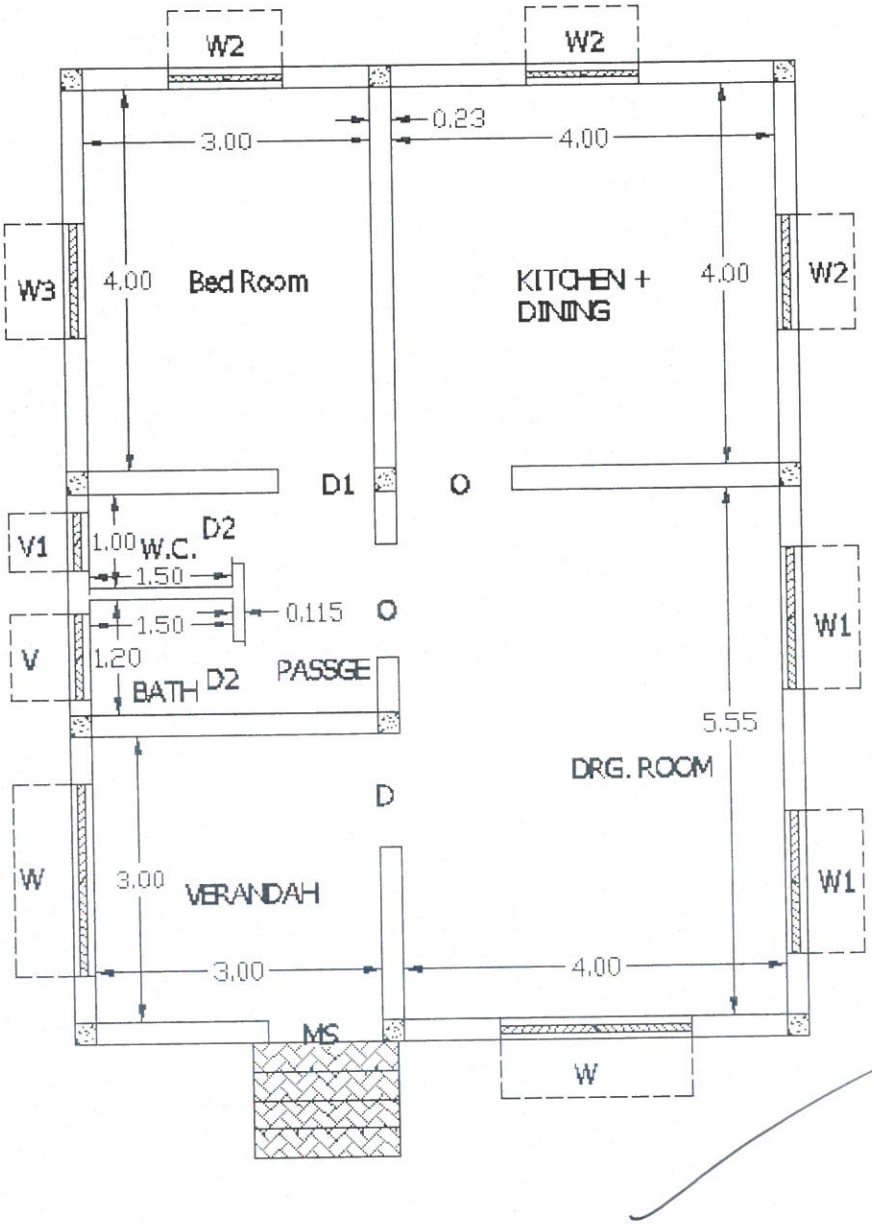
DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE-TIME TABLE

AutoCAD Course

			point □ Join (J) □ Explode(X) □ Region (REG)
8	*01.04.2023*	*6,7,8*	*Layout (LO) □ Layout wizard □ Multi view (MVIEW) □ View ports (VPORTS) Viewport maximum (VPMAX) □ Viewport minimum (VPMIN) □ LAYVPI □ Model space (MS) □ Paper space (PS) □ Model,Tilemode (TI),Attributes (ATT) External reference (XR) □ Page Setup Manager □ Plot (Ctrl+P) □ Sheet set(SSM),Export(EXP) Options (OP) ,Image(IM) □ Imageadjust □ Imageattach Imageclip □ Imagequality □ Imageframe □ Title block creation □*
9	*22.04.2023*	*6,7,8*	*Isometric views □ Isoplane change □ Ellipse(EL) ,Isocircle,**Isometric practice**,3D-MODELING □ Introduction to AutoCAD 3d □ Starting three dimensional modelling in AutoCAD □ Use of three dimensional drawing □ Types of 3d models □ Wireframe models □ Surface model,Solid model,**Visual Styles** ,2D Wireframe □ Wireframe Hidden □ Conceptual Shaded □ Shaded with edges Shaded of gray Sketchy □ X-ray □ Realistic **Surface Creation** ,Planar surface □ Edge surface, Ruled surface, Revolved surface , Tabulated surface □ Surftab*
10	*29.04.2023*	*6,7,8*	***Creating Solid Models** □ Polysolid □ Box □ Wedge □ Cone □ Sphere , Cylinder , Torus □ Pyramid , Helix □ Presspull □ Sweep □ Revolve □ Loft,**3D Operations** □ 3D Move □ 3D Rotate □ 3D Align 3D Array □ Rectangular array Polar array □ 3D Mirror Slice □ Thickening,Convert to Surface □ Convert to solids □ Extract edges,**Solid Editing** □ Union □ Subtract □ Intersect □ Extrude faces Move faces □ Offset faces □ Rotate faces □ Taper faces □ Copy faces Color face,Delete faces □ Fillet edges Chamfer edges □ Imprint □ Separate □ Shell*
11	*06.05.2023*	*5,6,7*	*UCS icon □ Dynamic UCS □ Viewport □ Creating 3D Models (practice session),Material browser □ Assigning materials □ Assigning selected materials to object □ Basic rendering □ Creating new materials Default light □ Point light Spot light □ Distance light,□ Camera □ Walkthrough □ Motion recorder □ Import*
12	*06.05.2023*	*8*	*Internal Assessment 2*

Head of the Department
Department of Civil Engineering
PERI Institute of Technology
Mannivakkam, Chennai - 600 048



Proof

26/30

6/5/23

NAME	S. GOKUL CHANDRAN
REG. NO	411521103005
YEAR	II
DEPT	CIVIL
COURSECODE/NAME	CVA012-AUTOCAD
TEST DATE	06.05.2023

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ADD ON COURSE

CVA012 AutoCAD Course

STUDENTS LIST-II YEAR

S.No.	Register Number	Name of the Student
1	411521103002	Abishek B
2	411521103005	Gokul Chandran
3	411521103006	Kaviya V
4	411521103007	Pratheep kumar P
5	411521103008	Rakki B
6	411521103009	Tharun D
7	411521103010	Thenmozhi V
8	411521103011	Thunga Siresh S
9	411521103013	Vasunthara A
10	411521103301	Arun S
11	411521103302	Bhuvaneshwari S
12	411521103303	Ezhilarasan U
13	411521103304	Gokul Raj J
14	411521103305	Gurumoorthy S
15	411521103306	Janarthanan G
16	411521103307	Kamalakannan T
17	411521103308	Manikandan J
18	411521103309	Parthiban E
19	411521103310	Rajesh R
20	411521103311	Rijish Kumar M
21	411521103312	Selvam S

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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

CVA012-AutoCAD Course

STUDENTS LIST-II YEAR

S.No.	Register Number	Name of the Student
1	411521103002	Abishek B
2	411521103005	Gokul Chandran
3	411521103006	Kaviya V
4	411521103007	Pratheep kumar P
5	411521103008	Rakki B
6	411521103009	Tharun D
7	411521103010	Thenmozhi V
8	411521103011	Thunga Siresh S
9	411521103013	Vasunthara A
10	411521103301	Arun S
11	411521103302	Bhuvaneshwari S
12	411521103303	Ezhilarasan U
13	411521103304	Gokul Raj J
14	411521103305	Gurumoorthy S
15	411521103306	Janarthanan G
16	411521103307	Kamalakannan T
17	411521103308	Manikandan J
18	411521103309	Parthiban E
19	411521103310	Rajesh R
20	411521103311	Rijish Kumar M
21	411521103312	Selvam S

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE-AutoCAD Course

ATTENDANCE SHEET

S.No	Register Number	Name of the Student	YEAR	04-02-2023	11-02-2023	18-02-2023	25-02-2023	04.03.2023	18.03.2023	25.03.2023	01.04.2023	22.04.2023	29.04.2023	06.05.2023
1	411521103002	Abishek B	II											
2	411521103005	Gokul Chandran	II											
3	411521103006	Kaviya V	II											
4	411521103007	Pratheep kumar P	II											
5	411521103008	Rakki B	II											
6	411521103009	Tharun D	II				FB			AB				
7	411521103010	Thenmozhi V	II											
8	411521103011	Thunga Siresh S	II											
9	411521103013	Vasunthara A	II											
10	411521103301	Arun S	II											
11	411521103302	Bhuvaneshwari S	II											
12	411521103303	Ezhilarasan U	II											
13	411521103304	Gokul Raj J	II											
14	411521103305	Gurumoorthy S	II					AB						
15	411521103306	Janarthanan G	II											
16	411521103307	Kamalakannan T	II											
17	411521103308	Manikandan J	II											
18	411521103309	Parthiban E	II											
19	411521103310	Rajesh R	II											
20	411521103311	Rijish Kumar M	II											
21	411521103312	Selvam S	II											

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No. : 411521103005

Name of the Student : S. GOKUL CHANDRAN

Date : 6/5/2023

Name of the Trainer : Mr. SIMSON

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		√		
2	How relevant was the content discussed by the resource person?		√		
3	How much interesting was the session for you?		√		
4	Did the course covering full fill your expectation?			√	
5	What is your opinion about value added course?	√			
6	Was the session interactive?		√		
7	The content was organized and easy to follow.		√		
8	The instructors explained the session well and provided practical training.		√		
9	Overall effectiveness of the course?			√	
10	I will recommended this seminar /workshop /conference/Value added course to other conservators	√			

Any suggestions do you have for improving the events?

S. Gokulchandran

Signature of the student

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No. : 411521103308

Name of the Student : MANIKANDAN. J

Date : 06/05/2023

Name of the Trainer : Mr. SINSOM

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		✓		
2	How relevant was the content discussed by the resource person?		✓		
3	How much interesting was the session for you?	✓			
4	Did the course covering full fill your expectation?	✓			
5	What is your opinion about value added course?		✓		
6	Was the session interactive?		✓		
7	The content was organized and easy to follow.		✓		
8	The instructors explained the session well and provided practical training.	✓			
9	Overall effectiveness of the course?	✓			
10	I will recommended this seminar /workshop /conference/Value added course to other conservators		✓		

Any suggestions do you have for improving the events?

J. Manikandan
Signature of the student

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No. : 411521103302

Name of the Student : BHUVANESHWARI. S

Date : 06.05.2023

Name of the Trainer : Mr. SIMSON

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		√		
2	How relevant was the content discussed by the resource person?		√		
3	How much interesting was the session for you?		√		
4	Did the course covering full fill your expectation?		√		
5	What is your opinion about value added course?	√			
6	Was the session interactive?		√		
7	The content was organized and easy to follow.	√			
8	The instructors explained the session well and provided practical training.	√			
9	Overall effectiveness of the course?	√			
10	I will recommended this seminar /workshop /conference/Value added course to other conservators		√		

Any suggestions do you have for improving the events?

Bhuvanesh. S.

Signature of the student

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No. : 411521103007

Name of the Student : P. Pratheep kumar

Date : 6/5/2023

Name of the Trainer : Mr. Simson

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		√		
2	How relevant was the content discussed by the resource person?		√		
3	How much interesting was the session for you?	√			
4	Did the course covering full fill your expectation?		√		
5	What is your opinion about value added course?		√		
6	Was the session interactive?		√		
7	The content was organized and easy to follow.		√		
8	The instructors explained the session well and provided practical training.	√			
9	Overall effectiveness of the course?		√		
10	I will recommended this seminar /workshop /conference/Value added course to other conservators		√		

Any suggestions do you have for improving the events?

P. Pratheep

Signature of the student

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No. : 411521103310

Name of the Student : R. RAJESH

Date : 6/5/2023

Name of the Trainer : Mr. Simson

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		√		
2	How relevant was the content discussed by the resource person?		√		
3	How much interesting was the session for you?		√		
4	Did the course covering full fill your expectation?		√		
5	What is your opinion about value added course?		√		
6	Was the session interactive?	√			
7	The content was organized and easy to follow.		√		
8	The instructors explained the session well and provided practical training.	√			
9	Overall effectiveness of the course?	√			
10	I will recommended this seminar /workshop /conference/Value added course to other conservators		√		

Any suggestions do you have for improving the events?

R Rajesh

Signature of the student

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Organizes

ADD ON COURSE IN

"CVA012-AUTO CAD"

CERTIFICATE
OF COMPLETION

This is to certify that Mr / Ms. J. MANI GANDAN

studying II nd year in the Department of Civil Engineering has successfully completed the course on **CVA012-AUTO CAD** for the duration of **32** hours in the period from **04/02/2023** to **06/05/2023** during the Academic year **2022 - 2023.**

PRINCIPAL **VICE PRINCIPAL** **HOD**

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DEPARTMENT OF CIVIL ENGINEERING

Organizes

ADD ON COURSE IN

"CVA012-AUTO CAD"

CERTIFICATE
OF COMPLETION

This is to certify that Mr / Ms. S. GOKUL CHANDRAN (411521103005)

studying II nd year in the Department of Civil Engineering has successfully completed the course on **CVA012-AUTO CAD** for the duration of **32** hours in the period from **04/02/2023** to **06/05/2023** during the Academic year **2022 - 2023.**

PRINCIPAL **VICE PRINCIPAL** **HOD**

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DEPARTMENT OF CIVIL ENGINEERING

Organizes

ADD ON COURSE IN

"CVA012-AUTO CAD"

CERTIFICATE
OF COMPLETION

This is to certify that Mr / Ms. R. RAJESH (411521103310)

studying II nd year in the Department of Civil Engineering has successfully completed the course on **CVA012-AUTO CAD** for the duration of **32** hours in the period from **04/02/2023** to **06/05/2023** during the Academic year **2022 - 2023.**

PRINCIPAL **VICE PRINCIPAL** **HOD**

PERI

INSTITUTE OF TECHNOLOGY

28.01.2023

Chennai

From

The HOD-CIVIL,

Peri Institute of Technology

Mannivakkam,

Chennai-48

To

The Principal

PERI Institute of Technology

Chennai

Sir,

Sub: Approval to conduct a program on**"CVA035INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"**– Reg

The department of Civil Engineeringis planning to conduct a program titled **"CVA035INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"** training for Civil Engineering students. Kindly accord permission for conducting the program.

S.No.	Year	Scheduled Date	Session
1	III	04-02-2023 to 06-05-2023	6.7.8

Thanking You

Yours Truly

28/01/23

HOD/CIVIL

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

Head of the Department
Department of Civil Engineering
PERI Institute of Technology,
Mannivakkam, Chennai - 600 048

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INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2022-2023

PERIIT /CIVIL/Add on Course/2022-2023/02 **Date: 28.01.2023**

CIRCULAR

Department of Civil Engineering is planned to conduct a program titled **"CVA035INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"** for the Academic Year 2022 – 2023 for CIVIL Engineering students directed to attend the program.

S.No.	Year	Scheduled Date	Session
1	III	04-02-2023 to 06-05-2023	6,7,8

Program Co-ordinator

Head of the Department

Head of the Department
Department of Civil Engineering
PERI Institute of Technology,
Mannivakkam, Chennai - 600 048

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members – Civil
5. Main – Notice Board

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE-CVA035 Introduction to Non-Destructive Testing and QA/QC

Minutes of the Meeting held on 26.01.2023

Venue : HOD Room, Civil Department, Beta Block,
PERI Institute of Technology
Date : 26.01.2023
Time : 10:00am – 11:30am

Agenda of the Meeting:

1. Course and Faculty selection
2. Syllabus preparation
3. Tentative Timetable preparation
4. Assessment method discussion

Members Present:

1. Mr. B. Magesh, Vice Principal, PERI Institute of Technology
2. Mr. M. Pitchi Rajan, Head of the Department, Civil Engineering
3. Ms. C. Lavanya, VAC Coordinator, Civil Engineering
4. Ms. M. Kalaivani, Industrial Expert, L&T Construction, Chennai

Ms. C. Lavanya, VAC Coordinator welcomed and briefed the consultative committee members about the meeting. The guidelines prescribed for Value Added Courses by Anna University are disseminated to the consultative committee members.

Agenda Item 1: Course and Faculty selection

In the academic year 2023-24 odd semester, for third year ,fourth year students (2021-2025 batch) **CVA035 Introduction to Non-Destructive Testing and QA/QC** is selected based on the interest of students and the suggestion by Vice Principal, Head of the Department and Industry expert.

Agenda Item 2: Syllabus preparation

The syllabus is framed in accordance with the view to achieve the desired outcomes of the course. The courses similar to the selected course in the curriculum of UG and PG programmes offered by various IITs, NITs, Anna University and other Universities has been analysed and final syllabus is framed by the consultative committee members.

Agenda Item 3: Tentative Timetable preparation

The Timetable for VAC classes and Internal Assessment is prepared based on guidelines prescribed by Anna University. Total of 30 periods with 3 hours on Saturdays is decided and communicated to the Course faculty.

Agenda Item 4: Assessment method

Two Internal assessments to be conducted one at the middle of the course and one at the end of the course is decided. Internal Assessment is decided to be conducted for MCQ.Each Internal Assessment to be conducted for 30 marks

Part A – 30 MCQ – 30 x 1 = 30 marks

Coordinator

Senior Faculty Member

Industry Expert

HOD – Civil Engg

Head of the Department
Civil Engineering
PERI Institute of Technology,
Manivakkam, Chennai - 600 048

Principal

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Manivakkam, Chennai - 600 048

DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2022-2023

ADD ON COURSE-SYLLABUS

CVA035INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

MODULE1:INTRODUCTION TO NDT&VISUAL TESTING

Concepts of Non-destructive testing-relative merits and limitations. NDT Versus mechanical testing. Fundamentals of Visual Testing, vision, lighting.Material attributes, environmental factors, visual perception. direct and indirect methods, mirrors, magnifiers, boroscopes. fibroscopes, light sources and special lighting.

MODULE 2 :LIQUID PENETRANT AND MAGNETIC PARTICLE TESTING

Liquid Penetrant Inspection: principle, applications. advantages and limitations, dyes, developers and cleaners. Methods & Interpretation.Magnetic Particle Inspection: Principles, applications, magnetization methods, magnetic particles. Testing Procedure, demagnetization, advantages and limitations. Interpretation and evaluation of test indications.

MODULE 3 :EDDY CURRENT TESTING AND THERMOGRAPHY

Eddy Current Testing: Generation of eddy currents. properties, eddy current sensing elements, probes. Instrumentation, Types of arrangement, applications. advantages, limitations, calibration. Interpretation/Evaluation.Thermography, Principle, Contact & Non-Contact inspection methods. Active & Passive methods, Liquid Crystal. Concept, example, advantages & limitations. Electromagnetic spectrum, infrared thermography-approaches, IR detectors, applications.

MODULE 4 :ULTRASONIC TESTIN ANDRADIOGRAPHY TESTING

Ultrasonic Testing: Types of ultrasonic waves, characteristics. attenuation, couplants, probes. Inspection methods-pulse echo, transmission and phased array techniques, types of scanning and displays, angle beam inspection of welds. TOFD technique, Thickness determination by ultrasonic method.Radiography Testing: Sources-X-rays and Gamma rays and their characteristics-absorption, scattering. Filters and screens. Imaging modalities-film radiography and digital radiography.

MODULE 5 :NDT APPLICATION

NDT application in civil engineering practices for determination of material strength, material composition. detection of corrosion, dampness, thickness, delaminations, air-voids, imperfections, cracks.NDT tests for assessing quality of hardened concrete, structural steel, welds and joints, repair and retrofitting applications.

Head of the Department
Department of Civil Engineering
PERI Institute of Technology,
Mannivakkam, Chennai - 600 048

DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2022-2023

ADD ON COURSE-TIME TABLE

CVA035-INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

S.No	Date	Hours	Topic
1	04-02-2023	6,7,8	Concepts of Non-destructive testing-relative merits and limitations, NDT Versus mechanical testing. Fundamentals of Visual Testing, vision, lighting
2	11-02-2023	6,7,8	Material attributes, environmental factors, visual perception. direct and indirect methods, mirrors, magnifiers, boroscopes. fibroscopes, light sources and special lighting.
3	18-02-2023	6,7,8	Liquid Penetrant Inspection: principle, applications, advantages and limitations, dyes, developers and cleaners. Methods & Interpretation.
4	25-02-2023	6,7,8	Magnetic Particle Inspection: Principles, applications, magnetization methods, magnetic particles. Testing Procedure, demagnetization, advantages and limitations. Interpretation and evaluation of test indications.
5	04.03.2023	6,7,8	Eddy Current Testing: Generation of eddy currents, properties, eddy current sensing elements, probes. Instrumentation. Types of arrangement, applications, advantages, limitations, calibration, Interpretation/Evaluation
6	18.03.2023	8	Internal Assessment 1
7	25.03.2023	6,7,8	Thermography, Principle, Contact & Non-Contact inspection methods, Active & Passive methods, Liquid Crystal, Concept, example, advantages & limitations. Electromagnetic spectrum, infrared thermography-approaches, IR detectors, applications.
8	01.04.2023	6,7,8	Ultrasonic Testing: Types of ultrasonic waves, characteristics, attenuation, couplants, probes. Inspection methods-pulse echo, transmission and phased array techniques, types of scanning and displays, angle beam inspection of welds. TOFD technique. Thickness determination by ultrasonic method
9	22.04.2023	6,7,8	Radiography Testing: Sources-X-rays and Gamma rays and their characteristics-absorption, scattering. Filters and screens. Imaging modalities-film radiography and digital radiography.
10	29.04.2023	6,7,8	NDT application in civil engineering practices for determination of material strength, material composition, detection of corrosion, dampness, thickness, delaminations, air-voids, imperfections, cracks.
11	06.05.2023	5,6,7	NDT tests for assessing quality of hardened concrete, structural steel, welds and joints, repair and retrofitting applications.
12	06.05.2023	8	Internal Assessment 2

Head of the Department
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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

CVA035-INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENTS LIST

S.No.	Register Number	Name of the Student	YEAR
1	411520103001	Arun K	III
2	411520103003	Gokulnath H	III
3	411520103004	Guneshdharan K	III
4	411520103005	Nisha C	III
5	411520103006	Ragul E	III
6	411520103007	Saravanan M	III
7	411520103008	Sivaraman V	III
8	411520103009	Swetha T	III
9	411520103302	Bruno Joseph Aravindraj KB	III
10	411520103304	Indraraj N	III
11	411520103305	Kamesh B	III
12	411520103306	Kandeeban P	III
13	411520103307	Kathiravan S	III
14	411520103308	Raghul S	III
15	411520103309	Ranjithkumar R	III
16	411520103310	Sathya J	III
17	411520103311	Srinath P	III
18	411520103312	Suvam Karmakar	III
19	411520103313	Vanchinathan M	III
20	411520103314	Venkatesh S	III
21	411519103001	Aarif Ahmed F	IV
22	411519103002	Kesu Bhanu Chandra	IV
23	411519103003	Gopi Anand D	IV
24	411519103004	Ranjith R	IV
25	411519103005	Sathish Kumar V	IV
26	411519103006	Ushananthini M	IV
27	411519103301	Malathi S	IV
28	411519103302	Vigneshwaran D	IV

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

ATTENDANCE SHEET

S.No.	Register Number	Name of the Student	YEAR	04-02-2023	11-02-2023	18-02-2023	25-02-2023	04.03.2023	18.03.2023	25.03.2023	01.04.2023	22.04.2023	29.04.2023	06.05.2023
1	411520103001	Arun K	III											
2	411520103003	Gokulnath H	III											
3	411520103004	Guneshdharan K	III											
4	411520103005	Nisha C	III											
5	411520103006	Ragul E	III											
6	411520103007	Saravanan M	III											
7	411520103008	Sivaraman V	III											
8	411520103009	Swetha T	III											
9	411520103302	Bruno Joseph Aravindraj KB	III											
10	411520103304	Indraraj N	III											
11	411520103305	Kamesh B	III											
12	411520103306	Kandeeban P	III											
13	411520103307	Kathiravan S	III											
14	411520103308	Raghul S	III											
15	411520103309	Ranjithkumar R	III											
16	411520103310	Sathya J	III											
17	411520103311	Srinath P	III											
18	411520103312	Suvam Karmakar	III											
19	411520103313	Vanchinathan M	III											
20	411520103314	Venkatesh S	III											
21	411519103001	Aarif Ahmed F	IV											
22	411519103002	Kesu Bhanu Chandra	IV											
23	411519103003	Gopi Anand D	IV											
24	411519103004	Ranjith R	IV											
25	411519103005	Sathish Kumar V	IV											
26	411519103006	Ushananthini M	IV											
27	411519103301	Malathi S	IV											
28	411519103302	Vigneshwaran D	IV											

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ADD ON COURSE-ASSESSMENT -I

CVA035 -INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

Year/Sem/Sec	**III/VI**	**Date**	**18.03.2023**
Department	**CIVIL**	**Duration**	**45 minutes**
Faculty	**Ms.C.Lavanya**	**Max. Marks**	**25**

Note:MARK THE CORRECT ANSWER IN OMR SHEET

1	---------- is a method of detecting internal flaws in engineering materials without breaking them. (a)NDT(b) NDE(c) NDI(d)EDT
2	What does "NDT" stand for? (a) Non-driving test (b) Non-destructive test (c) Non-dry test (d) Non-dial test
3	Which of the following is a non-destructive testing method a) Metallographic Testing b) Hardness Testing c) Stress Testing d) Radiography
4	The Non-Destructive Inspection (NDI) technique employed during inspection for castings of tubes and pipes to check the overall strength of a casting in resistance to bursting under hydraulic pressure is (a) Pressure testing (b) Magnetic particle inspection (c) Fluorescent penetrant (d) Radiographic inspection
5	----- are the commonly used NDT methods . a) Magnetic particle test b) Liquid penetrant test c) Radiography (X-ray/Gamma ray) test d) All the above
6	Ultrasonic testing is done in materials to determine a) Cracks below the surface b) Yield strength c) Ultimate tensile strength
	d) Hardness
7	Non - destructive testing plays an important role in a) Quality control b) Production control c) Planning control d) Quantitative analysis
8	One of the non destructive tests is "liquid penetrate testing". In this type a liquid penetrant is passed through the object to be tested. Which one of the following is a disadvantage in the above test? a) Parts with large surface areas can be measured rapidly at a low cost b) Can be applied only on nonporous materials c) Parts with complex shapes can be inspected d) Low initial investment cost
9	Which type of non-destructive test is suitable to check the internal defects weld in high-pressure boiler welding? a) Magnetic particle test b) Liquid penetrant test c) Radiography test d) Visual test
10	Which of the following is a non-destructive testing method a) Metallographic Testing b) Hardness Testing c) Stress Testing d) Radiography

11	Functions of optical aids are------- a) Magnify defects that can't be detected by unaided eye. b) Permits visual checks of areas not accessible to the unaided eye c) Both d) None
12	Defects that can be detected by unaided Visual Inspection are----- 1. Presence or absence of oxide film or corrosive products. 2. Presence or absence of cracks, orientation and position of cracks. 3. Surface porosity, unfilled craters, contour of the weld beads, etc a) 1,2 b) 1,2,3 c) 2,3 d) 1,3
13	What is the field of view range of borescope? a) 30 to 180 degree b) 10 to 90 degree c) 60 to 360 degree d) 10 to 180 degree
14	Which of the following option is true about hybrid borescopes? a) Use rod lenses combined with concave lenses b) Use rod lenses combined with concave mirror c) Use rod lenses combined with convex lenses d) Use rod lenses combined with convex mirror
15	Which type of special purpose system is used for the examination of hazardous process or for extreme radiations? a) Fibrescope b) Chamberscope c) Periscope d) Vacuum borescope
16	. Which of the following is not true for rigid borescopes? a) Operates like telescope in reverse b) Good for rapid examination c) Video adaptation is present d) Semi Rigid sheathing is present
17	Which of the following option is true for the given statements about flexible fibrescope? Statement 1: Fibrescope produce higher resolution than videoscope.
	Statement 2: Videoscopes have longer working length than fibrescope. a) T, T b) T, F c) F, F d) F, T
18	What is the use of fluorescent penetrants? a) Develop permanent visual records of a remote object b) Illuminates and observes internal, closed or inaccessible areas c) Enhance the observation of surface cracks d) Evaluate surface finish, shape and micro structure
19	Ferromagnetic material are (a) Capable of being magnetized (b) Not capable being magnetized (c) Attracted by a magnet (d) Both a & C
20	Magnetic particle testing (MPT) is a non destructive examination method used for finding (a) Surface discontinuities (b) Subsurface discontinuities (c) Both a & b (d) Any discontinuity in the material
21	A material that is difficult to magnetize shall have (a) High resistivity (b) High retentively (c) High permeability (d) Low permeability
22	. Advantage of Magnetic particle testing over Penetrant testing (a) It can detect sub surface discontinuities (b) MPI is faster than LPI (c) Both a & b (d) none of the above
23	A magnetic particle built up shall be strong on discontinuity while discontinuity be oriented _____to the magnetic field (a) 270 Degree C (b) 90 Degree C (c) 180 Degree C (d) 45 Degree C
24	Which of the following can be magnetized (a) Iron (b) Nickel (c) a & b both (d) None of the above
25	which of the following devices, the eddy current effect is not used? a) induction furnace b) magnetic braking in train c) Electromagnet d) electric heater

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ADD ON COURSE-ASSESSMENT -I

"INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

WRITE THE OPTIONS IN THE GIVEN SPACE

Year/Sem/Sec	**III/VI**	**Date**	**18.03.2023**
Department	**CIVIL**	**Duration**	**45 minutes**
REGISTER No.	411520103001	**Marks Obtained**	22
STUDENT NAME	ARUN.K	**Signature**	

Q.NO	OPTION	Q.NO	OPTION	Q.NO	OPTION	Q.NO	OPTION	Q.NO	OPTION
1	A ✓	6	A ✓	11	C ✓	16	D ✓	21	D ✓
2	A ✓	7	A ✓	12	B ✓	17	D ✓	22	C ✓
3	D ✓	8	B ✓	13	B ✓	18	C ✓	23	B ✓
4	A ✓	9	B ✗	14	C ✓	19	C ✓	24	C ✓
5	D ✓	10	C ✗	15	C ✓	20	B ✗	25	D ✓

22/25

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ADD ON COURSE-ASSESSMENT -I

"INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

WRITE THE OPTIONS IN THE GIVEN SPACE

Year/Sem/Sec	**III/VI**	**Date**	**18.03.2023**
Department	**CIVIL**	**Duration**	**45 minutes**
REGISTER No.	411520103310	**Marks Obtained**	18
STUDENT NAME	SATHYA . J	**Signature**	Sathya. J.

Q.NO	*OPTION*	*Q.NO*	*OPTION*	*Q.NO*	*OPTION*	*Q.NO*	*OPTION*	*Q.NO*	*OPTION*
1	A ✓	6	A ✓	11	C ✓	16	A ✗	21	D ✓
2	A ✓	7	A ✓	12	B ✓	17	A ✗	22	C ✓
3	B ✗	8	B ✓	13	B ✓	18	C ✓	23	B ✓
4	C ✗	9	B ✗	14	C ✓	19	C ✓	24	C ✓
5	C ✗	10	B ✗	15	C ✓	20	C ✓	25	D

18/25

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE-ASSESSMENT -II

"CVA035-INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

Year/Sem/Sec	**III/VI**	**Date**	**06.05.2023**
Department	**CIVIL**	**Duration**	**45 minutes**
Faculty	**Ms.C.Lavanya**	**Max. Marks**	**25**

Note:MARK THE CORRECT ANSWER IN THE SPACE PROVIDED

1	In the given figure a metallic plate A is allowed to swing like a simple pendulum between the magnetic poles and it comes to rest after time t. If a slot is cut in the plate A and then it is allowed to swing with the same initial velocity as before then the time taken by it to come to rest will be:  a) More than t b) Less than t c) t d) Can't say
2	The laminated cores are used in transformers to reduce: a) Magnetic losses b) Flux leakage c) Eddy current losses d) None of these
3	Which of the following is correct regarding eddy currents in the coil? a) Eddy currents flow in straight lines, like a wire. b) Eddy current helps in generating electrical energy. c) By making use of a laminated core, eddy currents are increased. d) Eddy currents converts useful energy into heat and waste it.
4	The commonly used frequency range for ultrasonic testing is (a) 5Hz-10Hz (b) 10Hz-20Hz (c) 20kHz-10MHz (d) 50MHz -100MHz
5	As the ultrasonic frequency increases (a) Velocity of sound increases (b) Velocity of sound decreases (c) Wave length decreases (d) Wave length increases
6	Which NDT method is mostly used to disclose the sub-surface lamination in a rolled plates (a) RT (b) UT (c) ET (d) MT
7	The equation describing wavelength in terms of velocity and frequency is (a) wavelength = velocity × frequency (b) wavelength = z (frequency × velocity) (c) wavelength = velocity ÷ frequency (d) wavelength = frequency ÷ velocity
8	The wavelength of an ultrasonic wave is (a) directly proportional to velocity and frequency. (b) directly proportional to velocity and inversely proportional to frequency. (c) inversely proportional to velocity and directly proportional to frequency (d) equal to the product of velocity and frequency.
9	Materials which can readily be inspected with frequencies of 1 to 5 MHz are (a) Steel, cast iron and concrete (b) Titanium, wood and aluminium

	(c) Magnesium, titanium and steel (d) All of the above
10	Test frequencies used in ultrasonic examination of castings w.r.t. forgings (a) Low frequency (b) Medium frequency (c) High frequency (d) No effect of frequency
11	If frequency is increased, wavelength: (a) decreases (becomes shorter). (b) increases (becomes longer). (c) remains the same but velocity increases. (d) remains the same but velocity decreases
12	X-rays penetrate human body and matter because it is radiation. a) electromagnetic radiation b) longer wavelength c) shorter wavelength d) invisible
13	X-rays are radiations then ultraviolet light. a) higher energy b) lower energy c) lower frequency d) longer wave length
14	During radiography of human body a will appear as darkest regions a) Crack b) Bone c) Muscle

	d) Skin
15	White radiation Consists of wavelength light. a) Single b) Two c) Three d) multiple
16	What is a destructive test? a) Destructive tests are applications for detecting flaws in materials without impairing their usefulness b) Destructive tests are applications for detecting flaws that impair the use of the materials such as pressure testing c) Destructive tests are applications for detecting flaws in materials with impairing their usefulness d) Destructive tests are applications for detecting flaws that do not impair the use of the materials such as pressure testing
17	------is the collective term for the physical manifestations of the defects like cracks, spalling, pop out, staining and corrosion. 1. Preservation 2. Distress 3. Defects 4. Failure
18	Which of the following is an acoustical property of the construction material? a) Thermal resistivity 2. Creep 3. Transmission 4. Hygroscopicity
19	The property of the material or a structure indicating the extent to which it can deform beyond the limit of yield deformation before failure or fracture is termed as: a) failure load b) Malleability c) Yielding d) ductility
20	With respect to ferrous metals which of the following is true? A. Iron is not any element of ferrous metals. B. Iron is a main element and most ferrous metal are magnetic. C. Iron is a main element and ferrous metals are not magnetic D. None
21	What is used for marking out steels?. A. Engineers blue.B. Wax crayon.C. Copper sulphate D.None
22	-----To estimate strength and hardness of the concrete in the cover region (IS: 13311 Part II) A. Rebound Hammer Test B. UPV Test: C. Both D. None

23	To measure homogeneity, uniformity, compactibility and presence of crack or void, thus representing durability of concrete A.Rebound Hammer Test B. UPV Test: C. Core Test D.Bar Locater and Cover Meter
24	--------: To evaluate in situ compressive strength of concrete (IS 516 & ASTM C42/41) A.Rebound Hammer Test B. UPV Test: C. Core Test D.Bar Locater and Cover Meter
25	----: To know the structural strength and protection to the reinforcement by cover concrete. A.Rebound Hammer Test B. UPV Test: C. Core Test D.Bar Locater and Cover Meter

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ADD ON COURSE-ASSESSMENT -II

"INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

WRITE THE OPTIONS IN THE GIVEN SPACE

Year/Sem/Sec	**III/VI**	**Date**	**06.05.2023**
Department	**CIVIL**	**Duration**	**45 minutes**
REGISTER No.	415 19103006	**Marks Obtained**	23
STUDENT NAME	VSHANANTHINI.M	**Signature**	VShananthini.

Q.NO	OPTION	Q.NO	OPTION	Q.NO	OPTION	Q.NO	OPTION	Q.NO	OPTION
1	B	6	B	11	A	16	B	21	C
2	C	7	C	12	C	17	B	22	A
3	D	8	B	13	A	18	C	23	B
4	C	9	C	14	A	19	B	24	C
5	C	10	B	15	D	20	B	25	C

23/25

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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENT'S FEEDBACK

Reg.No. : 411520106001

Name of the Student : ARUN: K

Date : 06/05/2023

Name of the Trainer : Ms. LAVANYA

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		✓		
2	How relevant was the content discussed by the resource person?		✓		
3	How much interesting was the session for you?	✓			
4	Did the course covering full fill your expectation?			✓	
5	What is your opinion about value added course?			✓	
6	Was the session interactive?		✓		
7	The content was organized and easy to follow.		✓		
8	The instructors explained the session well and provided practical training.	✓			
9	Overall effectiveness of the course?			✓	
10	I will recommended this seminar /workshop /conference/Value added course to other conservators	✓			

Any suggestions do you have for improving the events?

Signature of the student

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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENT'S FEEDBACK

Reg.No. : 411520103310

Name of the Student : Sathya. J

Date : 06/05/2023

Name of the Trainer : Ms. LAVANYA

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		✓		
2	How relevant was the content discussed by the resource person?		✓		
3	How much interesting was the session for you?	✓			
4	Did the course covering full fill your expectation?	✓	✓		
5	What is your opinion about value added course?		✓		
6	Was the session interactive?		✓		
7	The content was organized and easy to follow.	✓			
8	The instructors explained the session well and provided practical training.	✓			
9	Overall effectiveness of the course?	✓			
10	I will recommended this seminar /workshop /conference/Value added course to other conservators	✓			

Any suggestions do you have for improving the events?

J. Sathya.
Signature of the student

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ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENT'S FEEDBACK

Reg.No. : 411519103006

Name of the Student : USHANANTHINI . M

Date : 06/05/2023

Name of the Trainer : MS. LAVANYA

.If you have attended the Value added course we would like to make sure that the session was relevant and useful. Give your appropriate feedback to make the future sessions more beneficial to you.

Please tick (√) the option you find most suitable.

S.No.	Particular	Excellent (1)	Very good (2)	Good (3)	Poor (4)
1	How much the session was useful from knowledge and information point of view?		√		
2	How relevant was the content discussed by the resource person?		√		
3	How much interesting was the session for you?	√			
4	Did the course covering full fill your expectation?	√			
5	What is your opinion about value added course?		√		
6	Was the session interactive?	√			
7	The content was organized and easy to follow.	√			
8	The instructors explained the session well and provided practical training.		√		
9	Overall effectiveness of the course?	√			
10	I will recommended this seminar /workshop /conference/Value added course to other conservators	√			

Any suggestions do you have for improving the events?

Ushanandhini

Signature of the student

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DEPARTMENT OF CIVIL ENGINEERING

ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

FEEDBACK ANALYSIS

Rating:Excellent(1) Very good(2) Good(3) Poor(4)

S.No.	Register Number	Name of the Student	How much the session was useful from knowledge and information point of view?	How relevant was the content discussed by the resource person?	How much interesting was the session for you?	Did the course covering full fill your expectation?	What is your opinion about value added course?	Was the session interactive ?	The content was organized and easy to follow.	The instructors explained the session well and provided practical training.	Overall effectiveness of the course?	I will recommended this seminar /workshop /conference/Value added course to other conservators
1	411520103001	Arun K	2	2	1	3	3	2	2	1	3	1
2	411520103003	Gokulnath H	2	2	2	2	3	2	2	2	2	1
3	411520103004	Guneshdharan K	2	2	1	2	2	2	2	1	2	2
4	411520103005	Nisha C	2	2	2	3	2	2	2	2	3	1
5	411520103006	Ragul E	2	2	1	2	2	2	2	1	2	2
6	411520103007	Saravanan M	2	3	1	2	1	2	3	1	2	1
7	411520103008	Sivaraman V	2	2	2	3	2	2	2	2	3	2
8	411520103009	Swetha T	1	2	3	2	1	2	3	3	2	1
9	411520103302	Bruno Joseph Aravindraj KB	1	2	1	2	2	1	2	1	2	2
10	411520103304	Indraraj N	2	2	2	3	2	2	2	2	3	2
11	411520103305	Kamesh B	2	2	2	2	2	2	2	2	2	2
12	411520103306	Kandeeban P	2	2	2	2	1	2	2	2	2	2
13	411520103307	Kathiravan S	2	2	2	3	1	2	2	2	3	1
14	411520103308	Raghul S	2	2	1	2	1	2	2	1	2	1
15	411520103309	Ranjithkumar R	2	2	1	2	2	2	2	1	2	1
16	411520103310	Sathya J	2	2	1	1	2	2	2	1	1	1
17	411520103311	Srinath P	2	2	2	1	3	2	2	2	1	1
18	411520103312	Suvam Karmakar	2	2	2	2	2	1	2	1	1	1
19	411520103313	Vanchinathan M	2	2	2	2	2	1	2	2	1	1
20	411520103314	Venkatesh S	2	2	2	2	2	1	2	2	1	1
21	411519103001	Aarif Ahmed F	2	2	2	2	2	1	2	2	1	1
22	411519103002	Kesu Bhanu Chandra	2	2	2	2	3	1	2	1	1	1
23	411519103003	Gopi Anand D	2	2	1	2	1	1	1	1	1	1
24	411519103004	Ranjith R	2	2	1	2	1	1	1	1	1	1
25	411519103005	Sathish Kumar V	2	2	1	2	2	1	1	2	1	1
26	411519103006	Ushananthini M	2	2	1	1	2	1	1	2	1	1
27	411519103301	Malathi S	2	2	1	1	1	1	1	2	1	1
28	411519103302	Vigneshwaran D	2	2	1	1	2	1	2	2	1	1

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ADD ON COURSE IN

"CVA035 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"

CERTIFICATE
OF COMPLETION

This is to certify that Mr / Ms. K. ARUN (411520103001)

studying III rd year in the Department of Civil Engineering has successfully completed the course on **CVA035 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC** for the duration of **32** hours in the period from **04/02/2023** to **06/05/2023** during the Academic year **2022 - 2023.**

PRINCIPAL **VICE PRINCIPAL** **HOD**

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ADD ON COURSE IN

"CVA035 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"

CERTIFICATE
OF COMPLETION

This is to certify that Mr / Ms. J. SATHYA (411520103310)

studying III rd year in the Department of Civil Engineering has successfully completed the course on **CVA035 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC** for the duration of **32** hours in the period from **04/02/2023** to **06/05/2023** during the Academic year **2022 - 2023.**

PRINCIPAL **VICE PRINCIPAL** **HOD**

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ADD ON COURSE IN

"CVA035 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"

CERTIFICATE
OF COMPLETION

This is to certify that Mr / Ms. M. USHANANTHINI (411519103006)

studying IV th year in the Department of Civil Engineering has successfully completed the course on **CVA035 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC** for the duration of **32** hours in the period from **04/02/2023** to **06/05/2023** during the Academic year **2022 - 2023.**

PRINCIPAL **VICE PRINCIPAL** **HOD**

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INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /CSE/CC/2022-2023/01 **DATE: 22-02-2022**

CIRCULAR

All the Students are hereby informed that Our College is going to organize five days in Training in " Data Science ". The intension of this training is that our students should enhance the ability to manage interviews and improve their Skills .So all students are invited to attend this Event.

RESOURCE PERSON : Mr Harish,Data Scientist
TATA Consultancy Services, Chennai

DATE : 13-03-2022 TO 17-03-2022

TIME : 8.30 AM – 3.30 PM

VENUE : BETA-CONFERENCE HALL

Coordinator
22/02/2022

Head of the Department

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members – CSE Staffs
5. Main – Notice Board

PERI INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting

Course name: Add-On Course- DATA SCIENCE
Venue: CSE HOD Room, Beta Block ,PERI IT
Date:23/07/2022 Time:10:00 AM-10:15AM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Dr.R.Palson Kennedy,Principal
2. Dr.K.Varalakshmi,HOD/CSE
3. Mr Mr Harish,Data Scientist,TCS
4. Dr P.Neelaveni,Professor/CSE
5. Mr S.S.VasanthaRaja,Coordinator/AP-CSE

The meeting commenced with Mr. S.S.VasanthaRaja, the Coordinator, welcoming all the committee members and outlining the agenda for discussion.

Agenda Item 1:Syllabus preparation

The syllabus is framed in order to meet the objective of the course, various Universities,IITs,NITs syllabus has been taken into consideration for the syllabus preparation.

Agenda Item 2: Tentative Time Table

The Syllabus is prepared as per the University requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessments would be conducted at the end of the course to evaluate the participants

S.S. 23/7/22
Coordinator

Senior faculty member

HOD/CSE

PRINCIPAL

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048

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Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Course Code: CSA077

Course Name: Data Science

This course aims to equip you with the foundational knowledge and practical skills to embark on a thriving career in Data Science.The curriculum will meticulously cover essential concepts, data manipulation techniques, and in-demand tools to empower you to extract valuable insights from data. By the course's conclusion, you'll be proficient in wrangling, analyzing, and visualizing data to solve real-world problems and make data-driven decisions.

COURSE OBJECTIVES

- To develop practical data analysis skills, which can be applied to practical problems.
- To develop fundamental knowledge of concepts underlying data science projects.
- To develop practical skills needed in modem analytics.
- To explain how math and information sciences can contribute to building better algorithms and software.

EVENT SCHEDULE

COMPANY	EVENT	DATE & TIME
TATA Consultancy Services, Chennai	DATA SCIENCE	13-03-2022 TO 17-03-2022 **TIME** : 8.30 AM – 3.30 PM **VENUE :** PERIIT CONFERENCE HALL
Participation	IV YEAR CSE STUDENTS	

HOD/CSE

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam-48

Department of Computer Science and Engineering

TIME TABLE

Course Code: CSA077 **Year:IV YEAR CSE**

Course Name: DATA SCIENCE **Session: FN &AN**

Particulars	Session	Topic covered
DATE : 13-03-2022 TO 17-03-2022 **TIME : 8.30 AM – 3.30 PM** **VENUE: CONFERENCE HALL**	FN & AN	Introduction to data science-Exploratory data analysis-Introduction to machine Learning, Linear regression and regularization.
	FN & AN	Model selection and evaluation-Classification: kNN, decision trees-Classification: SVM,Ensemble methods: random forests-Intro to probability: Naïve Bayes and logistic regression.
	FN & AN	Feature engineering and selection-Clustering:k-means,hicrarchical,clustering-Dimensionality,reduction: PCA and SVD
	FN & AN	Text mining and information retrieval-Network Analysis-Recommender systems-Relational database-SQL .
	FN & AN	Big data storage and retrieval: noSQL,GraphOB,Big data distributed computing: map-map-reduce-spark rdd

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

SYLLABUS

MODULE 1: INTRODUCTION TO DATA SCIENCE

Introduction to data science-Exploratory data analysis-Introduction to machine learning Linear regression and regularization

MODULE II: UNVEILING THE CLASSIFICATION TOOLBOX

Model selection and evaluation-Classification: kNN, decision trees-Classification: SVM Ensemble methods: random forests-Intro to probability: Naïve Bayes and logistic regression

MODULE III: ADVANCED THE CONCEPTS OF DATASET

Feature engineering and selection-Clustering:k-means,hierarchieal,clustering-Dimensionality reduction: PCA and SVD

MODULE IV: TEXT MINING AND DATABASE

Text mining and information retrieval-Network Analysis-Recommender systems-Relational databases, SQL

MODULE V : BIG DATA ECOSYSTEM

Big data storage and retrieval: noSQL, GraphDB, Big data distributed computing: map-reduce, spark rdd

Coordinator

HOD/CSE

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INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Students Name List for Data Science (13.03.2022 to 17.03.2022)

S..No.	Register Number	Name of the Student
1.	411519104001	Akash G
2.	411519104002	Althaf Khan G
3.	411519104003	Ansul Jafera
4.	411519104004	Arulmani.G
5.	411519104005	Augustin Raja J
6.	411519104006	Ayesha Munawar M
7.	411519104007	Babyswetha.P
8.	411519104010	Blessy Evangelin L
9.	411519104011	Chitra. C
10.	411519104012	Dayana K
11.	411519104013	Deepak Kumar Bhagat
12.	411519104014	Dhaneshkumar M
13.	411519104016	Dinesh Kumar.N
14.	411519104017	Divya. G

15.	411519104018	Gabriel Nixson Jones.J
16.	411519104019	Gokul.R
17.	411519104020	Gopinath.V
18.	411519104021	Gownori Jasmitha
19.	411519104022	Hariharan B
20.	411519104023	Hariharan.R
21.	411519104024	Hariharan.S
22.	411519104026	Harshini Rajkumar
23.	411519104027	Hemavathy. K
24.	411519104028	Jagatheesan V
25.	411519104029	Jasmine Jenifer Mary X
26.	411519104031	Kabil J
27.	411519104032	Kalaivani K
28.	411519104033	Pavan Kaligiri
29.	411519104034	Karthick.A
30.	411519104035	Keerthana.V
31.	411519104036	Kishore C
32.	411519104037	Kishore.U
33.	411519104038	Kumaravel B M
34.	411519104039	Lakshmi Priya.S
35.	411519104041	Logeshwaran S

36.	411519104042	Malavika.M
37.	411519104043	Manasa A
38.	411519104044	Mani Bharathi. B
39.	411519104045	Manikandan.V
40.	411519104046	Mareeswari.M
41.	411519104047	Medepalli Yadidya
42.	411519104048	Mohamed Hameed N
43.	411519104049	Mukesh.S
44.	411519104050	Muthukumar M
45.	411519104053	Nandhini. J
46.	411519104054	Naveen L
47.	411519104060	Ben Joseph.P
48.	411519104093	Swetha.C
49.	411519104302	Balaji R
50.	411519104040	Linga Sai Dhathri
51.	411519104051	Nallapaneni Vamsi Krishna
52.	411519104052	Namburi Srinadh
53.	411519104055	Naveenkumar.D
54.	411519104056	Naveen Kumar .M
55.	411519104057	Nedunseraladhan S
56.	411519104058	Parthiban D

57.	411519104061	Pavithra.M
58.	411519104062	Poli.Sunil
59.	411519104063	Ponduri.Sri Sushma
60.	411519104064	Pooja M
61.	411519104065	Pradeep. T. R
62.	411519104066	Prakash.R
63.	411519104067	Praveen Kumar.S
64.	411519104068	Praveen Kumar.G
65.	411519104069	Priyadharshan V
66.	411519104070	Priyadharshini.M
67.	411519104071	Raghava R
68.	411519104072	Rajamurali. M
69.	411519104073	Revathi S
70.	411519104040	Linga Sai Dhathri
71.	411519104051	Nallapaneni Vamsi Krishna
72.	411519104052	Namburi Srinadh
73.	411519104055	Naveenkumar.D
74.	411519104056	Naveen Kumar .M
75.	411519104057	Nedunseraladhan S
76.	411519104058	Parthiban D
77.	411519104061	Pavithra.M

78.	411519104062	Poli.Sunil
79.	411519104063	Ponduri.Sri Sushma
80.	411519104064	Pooja M
81.	411519104065	Pradeep. T. R
82.	411519104066	Prakash.R
83.	411519104067	Praveen Kumar.S
84.	411519104068	Praveen Kumar.G
85.	411519104069	Priyadharshan V
86.	411519104070	Priyadharshini.M
87.	411519104071	Raghava R
88.	411519104072	Rajamurali. M
89.	411519104073	Revathi S
90.	411519104040	Linga Sai Dhathri
91.	411519104098	Vikram Rj
92.	411519104099	Vishwa C
93.	411519104100	Yokesh S
94.	411519104101	Yuvashree.R
95.	411519104098	Vikram Rj

S. S. V.
Co-ordinator
23/7

HOD

Dr. R. PALSON KENNEDY, M.E., Ph.D.
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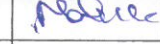
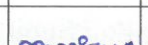
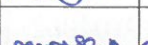
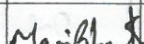
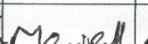
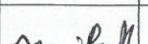
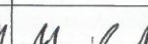
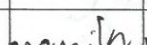
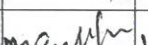
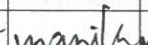
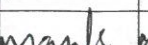
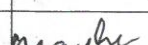
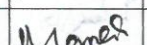
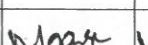
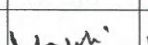
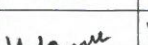
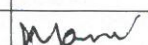
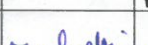
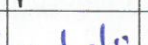
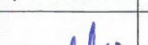
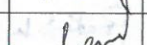
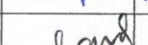
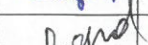
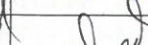
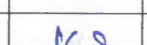
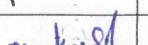
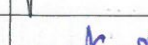
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance Sheet for Data Science (13.03.2022 to 17.03.2022)

S..No.	Register Number	Name of the Student	13.03.22	14.03.22	15.03.22	16.03.22	17.03.22
1.	411519104001	Akash G					
2.	411519104002	Althaf Khan G					
3.	411519104003	Ansul Jafera					
4.	411519104004	Arulmani.G					
5.	411519104005	Augustin Raja J					
6.	411519104006	Ayesha Munawar M					
7.	411519104007	Babyswetha.P					
8.	411519104010	Blessy Evangelin L					
9.	411519104011	Chitra. C					
10.	411519104012	Dayana K					
11.	411519104013	Deepak Kumar Bhagat					
12.	411519104014	Dhaneshkumar M					
13.	411519104016	Dinesh Kumar.N					
14.	411519104017	Divya. G					

15.	411519104018	Gabriel Nixson Jones.J					
16.	411519104019	Gokul.R					
17.	411519104020	Gopinath.V					
18.	411519104021	Gownori Jasmitha					
19.	411519104022	Hariharan B					
20.	411519104023	Hariharan.R					
21.	411519104024	Hariharan.S					
22.	411519104026	Harshini Rajkumar					
23.	411519104027	Hemavathy. K					
24.	411519104028	Jagatheesan V					
25.	411519104029	Jasmine Jenifer Mary X					
26.	411519104031	Kabil J					
27.	411519104032	Kalaivani K					
28.	411519104033	Pavan Kaligiri					
29.	411519104034	Karthick.A					
30.	411519104035	Keerthana.V					
31.	411519104036	Kishore C					
32.	411519104037	Kishore.U					
33.	411519104038	Kumaravel B M					
34.	411519104039	Lakshmi Priya.S					
35.	411519104041	Logeshwaran S					

36.	411519104042	Malavika.M					
37.	411519104043	Manasa A					
38.	411519104044	Mani Bharathi. B					
39.	411519104045	Manikandan.V					
40.	411519104046	Mareeswari.M					
41.	411519104047	Medepalli Yadidya					
42.	411519104048	Mohamed Hameed N					
43.	411519104049	Mukesh.S					
44.	411519104050	Muthukumar M					
45.	411519104053	Nandhini. J					
46.	411519104054	Naveen L					
47.	411519104060	Ben Joseph.P					
48.	411519104093	Swetha.C					
49.	411519104302	Balaji R					
50.	411519104040	Linga Sai Dhathri					
51.	411519104051	Nallapaneni Vamsi Krishna					
52.	411519104052	Namburi Srinadh					
53.	411519104055	Naveenkumar.D					
54.	411519104056	Naveen Kumar .M					
55.	411519104057	Nedunseraladhan S					
56.	411519104058	Parthiban D					

57.	411519104061	Pavithra.M					
58.	411519104062	Poli.Sunil					
59.	411519104063	Ponduri.Sri Sushma					
60.	411519104064	Pooja M					
61.	411519104065	Pradeep. T. R					
62.	411519104066	Prakash.R					
63.	411519104067	Praveen Kumar.S					
64.	411519104068	Praveen Kumar.G					
65.	411519104069	Priyadharshan V					
66.	411519104070	Priyadharshini.M					
67.	411519104071	Raghava R					
68.	411519104072	Rajamurali. M					
69.	411519104073	Revathi S					
70.	411519104040	Linga Sai Dhathri					
71.	411519104051	Nallapaneni Vamsi Krishna					
72.	411519104052	Namburi Srinadh					
73.	411519104055	Naveenkumar.D					
74.	411519104056	Naveen Kumar .M					
75.	411519104057	Nedunseraladhan S					
76.	411519104058	Parthiban D					
77.	411519104061	Pavithra.M					

78.	411519104062	Poli.Sunil						
79.	411519104063	Ponduri.Sri Sushma						
80.	411519104064	Pooja M						
81.	411519104065	Pradeep. T. R						
82.	411519104066	Prakash.R						
83.	411519104067	Praveen Kumar.S						
84.	411519104068	Praveen Kumar.G						
85.	411519104069	Priyadharshan V						
86.	411519104070	Priyadharshini.M						
87.	411519104071	Raghava R						
88.	411519104072	Rajamurali. M						
89.	411519104073	Revathi S						
90.	411519104040	Linga Sai Dhathri						
91.	411519104098	Vikram Rj						
92.	411519104099	Vishwa C						
93.	411519104100	Yokesh S						
94.	411519104101	Yuvashree.R						
95.	411519104098	Vikram Rj						

S. S. V.
Co-ordinator
23/7

HOD

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE: 17/03/2022

Name of the Student: Pooja.M
Register No: 411519104064
Year/Semester II
Course Code: CSA077
Course Name: Data science

1. What is your assessment of the course material?

   Data science is my assessment.

2. How effective was the instructor's delivery of the content?

   They did the instructions very good and they have conveyed the content clearly.

3. Rate the overall quality of the program.

   5

4. Would you suggest this program to your peers or underclassmen?

   NO, I don't

5. Suggestions for enhancement, if any:

   NO

Pooja.M
Signature of the Student

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE: 17/3/22

Name of the Student: Malavika .M
Register No: 411519104042
Year/Semester III
Course Code: CSA077
Course Name: Data Science

1. What is your assessment of the course material?
   First three topic in the portion !

2. How effective was the instructor's delivery of the content?
   The instructor delivers the content in easy and understandable manner

3. Rate the overall quality of the program.
   5, Nice

4. Would you suggest this program to your peers or underclassmen?
   Yes, it is useful for my career

5. Suggestions for enhancement, if any:
   Nil

M. Malavika
Signature of the Student

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Organizes

ADDON COURSE IN

"DATA SCIENCE"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. MANASA A

of III Year, Computer Science and Engineering, PERI Institute of Technology has completed an addon course in **DATA SCIENCE** held from **13th March 2023 to 17th March 2023.**

PRINCIPAL

COURSE COORDINATOR

PERI
INSTITUTE OF TECHNOLOGY

PERI
EDUCATION

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Organizes

ADDON COURSE IN

"DATA SCIENCE"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. MALAVIKA. M.

of III Year, Computer Science and Engineering, PERI Institute of Technology has completed an addon course in **DATA SCIENCE** held from **13th March 2023 to 17th March 2023.**

PRINCIPAL

COURSE COORDINATOR

PERI
INSTITUTE OF TECHNOLOGY

PERI EDUCATION

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Organizes

ADDON COURSE IN

"DATA SCIENCE"

CERTIFICATE OF PARTICIPATION

This is to certify that ~~Mr~~ / Ms. Pooja. M.

of II Year, Computer Science and Engineering, PERI Institute of Technology has completed an addon course in **DATA SCIENCE** held from **13th March 2023 to 17th March 2023.**

PRINCIPAL

S. S.

COURSE COORDINATOR

PERI
INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /CSE/CC/2022-2023/02 **Date: 13-03-2023**

CIRCULAR

The Department of Computer Science and Engineering is planning to conduct a program titled "Workshop on Artificial Intelligence & Data Science" for the Academic Year 2022 – 2023. III year Computer Science and Engineering students are directed to attend the program.

S.No.	Year	Scheduled Date	Time
1	IV	21/03/2023 -24/3/2023	8.30 AM to 3.30 PM

Co-ordinator **Head of the Department**

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members – CSE Staffs
5. Main – Notice Board

13-03-2023

Chennai

From

Mrs.Varalakshmi

Assistant Professor

Department of Computer Science and Engineering

PERI Institute of Technology

Chennai

To

The Principal

PERI Institute of Technology

Chennai

Sir,

[Sub: Approval to conduct program on Workshop on Artificial Intelligence & Data Scince – Reg.]

Department of Computer Science and Engineering is planning to conduct program titled "**Workshop on Artificial Intelligence & Data Science**" training for III Year Computer Science and Engineering students. Kindly accord permission for conducting the program.

S.No.	Year	Scheduled Date	Time
1	IV	21/03/2023 -24/3/2023	8.30 AM to 3.30 PM

Thanking You

Yours Truly

Mrs.Varalakshmi

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2019-2020

AGENDA OF THE MEETING

Course Code: CSA014 **Year: III year**

Course Name: Artificial Intelligence & Data Science **Session: FN & AN**

Particulars	Session	Topic covered
DATE: 21/03/2023 - 24/3/2023 **TIME: 8.30 A.M To 3.30 P.M** **VENUE: CONFERENCE HALL**	FN & AN	**Module 1: Foundational Concepts and Techniques** Introduction to AI and Data Science-Statistics and Probability: - Linear Algebra-, applications in machine learning-Programming for Data Science: Python basics, libraries like pandas and NumPy.
	FN & AN	**Module 2: Machine Learning Fundamentals** Supervised Learning: Regression (linear, logistic), classification (kNN, decision trees).Unsupervised Learning:.Model Selection and Evaluation-Introduction to Deep Learning: Artificial neural networks, basic concepts
	FN & AN	**Module 3: Data Engineering and Management** Data Acquisition and Cleaning- Feature Engineering and Selection- Data Storage and Retrieval- Data Warehousing and Business Intelligence
	FN & AN	**Module 4: Advanced Topics in AI and Data Science** Natural Language Processing (NLP)- Computer Vision- Reinforcement Learning- Ensemble Methods- Applications in Healthcare

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INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Students Name List for Artificial Intelligence & Data Science (21/03/2023 -24/3/2023)

S..No.	Register Number	Name of the Student
1.	411521104001	Abdul Majith A
2.	411521104002	Abishekraj K B
3.	411521104003	Abinash S
4.	411521104004	Adnan Mohammed S
5.	411521104005	Akash Jebaraj I
6.	411521104006	Annamalai M
7.	411521104007	Archana B
8.	411521104008	Arokia Anushya A
9.	411521104009	Arul Pandian P
10.	411521104010	Ashwin V
11.	411521104011	Bargavi A V
12.	411521104012	Bhuvanesh G
13.	411521104013	Chandrakala V
14.	411521104014	Chandru B S
15.	411521104015	Damodaren V

16.	411521104016	Dayana M
17.	411521104017	Deepak J
18.	411521104018	Deepak Kumar K
19.	411521104019	Deepan M
20.	411521104020	Deepan Chakkaravarthi K
21.	411521104021	Devakumari S
22.	411521104022	Devatharshini B
23.	411521104023	Dhanush V
24.	411521104024	Dhanush Vel Nidhi M
25.	411521104025	Dharani T
26.	411521104026	Dinesh V
27.	411521104027	Dinesh Chaudhary D
28.	411521104028	Dinesh Kumar L
29.	411521104029	Dinesh Kumar M
30.	411521104030	Dinesh Kumar S
31.	411521104031	Divya S
32.	411521104032	Elakiya K
33.	411521104033	Elakya R
34.	411521104034	Franklin Joshwa S
35.	411521104035	Gayathri B
36.	411521104036	Gokul D
37.	411521104037	Gokul R

38.	411521104038	Gowsalya D
39.	411521104039	Guberan T
40.	411521104040	Hari Krishnan U
41.	411521104041	Harini M
42.	411521104042	Harish S
43.	411521104044	Ishasri P
44.	411521104045	Jagan M
45.	411521104046	Jana R
46.	411521104047	Jeffrin Nelson J
47.	411521104048	Jitto M
48.	411521104050	Jogan Roy K
49.	411521104051	Karthi S
50.	411521104052	Karthika E
51.	411521104053	Karthikeyan N
52.	411521104054	Kavitha S
53.	411521104055	Kavitha V
54.	411521104056	Keerthika M
55.	411521104057	Keerthivasan S
56.	411521104058	Kowsalya B
57.	411521104059	Lakshmi Priya M
58.	411521104060	Lavanya B
59.	411521104301	Anitha M

60.	411521104302	Arun
61.	411521104303	Baskar C
62.	411521104304	Christoper Daniel
63.	411521104305	Dhivakar M
64.	411521104306	Harish P
65.	411521104309	MadanKishore
66.	411521104311	Pradeep Raj
67.	411521104312	Praveen V
68.	411521104701	Mohamed sirajuddin
69.	411521104061	Lavanya P
70.	411521104063	Little Jacob P
71.	411521104064	Madhumitha S
72.	411521104065	Mageswari D.
73.	411521104066	Maha Lakshmi M
74.	411521104067	Maluni B
75.	411521104068	Mariya Joshwa S
76.	411521104069	Meenatshigunavathi R
77.	411521104070	Mohammmed Abdul Rahim P
78.	411521104071	Mohan Raj M
79.	411521104072	Mohan Raji S.
80.	411521104074	Navya Vijayan *
81.	411521104075	Nimmi Hassan P

82.	411521104076	Nitish Kumar S
83.	411521104077	Nivedya V.
84.	411521104078	Nivetha R
85.	411521104080	Pavithra U
86.	411521104081	Pooja B.
87.	411521104082	Poojasree A
88.	411521104083	Pradeep Kumar M.
89.	411521104061	Lavanya P
90.	411521104063	Little Jacob P
91.	411521104064	Madhumitha S
92.	411521104065	Mageswari D.
93.	411521104066	Maha Lakshmi M
94.	411521104067	Maluni B
95.	411521104068	Mariya Joshwa S
96.	411521104069	Meenatshigunavathi R
97.	411521104070	Mohammmed Abdul Rahim P
98.	411521104071	Mohan Raj M
99.	411521104072	Mohan Raji S.
100.	411521104074	Navya Vijayan *
101.	411521104075	Nimmi Hassan P
102.	411521104076	Nitish Kumar S
103.	411521104077	Nivedya V.

104.	411521104080	Pavithra U
105.	411521104081	Pooja B.
106.	411521104082	Poojasree A
107.	411521104083	Pradeep Kumar M.
108.	411521104084	Priya M
109.	411521104085	Priyadharshini R
110.	411521104086	Pugazhendhi J
111.	411521104087	Pushparaj E
112.	411521104088	Rahul A.D
113.	411521104080	Pavithra U
114.	411521104081	Pooja B.
115.	411521104082	Poojasree A
116.	411521104083	Pradeep Kumar M.
117.	411521104084	Priya M
118.	411521104085	Priyadharshini R
119.	411521104086	Pugazhendhi J
120.	411521104087	Pushparaj E
121.	411521104088	Rahul A.D
122.	411521104080	Pavithra U
123.	411521104081	Pooja B.
124.	411521104082	Poojasree A

Co-ordinator **HOD**

PERI
INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance Report for Artificial Intelligence & Data Science (21/03/2023 -24/3/2023)

S..No.	Register Number	Name of the Student	21.03.23	22.03.23	23.03.23	24.03.23
1.	411521104001	Abdul Majith A				
2.	411521104002	Abishekraj K B				
3.	411521104003	Abinash S				
4.	411521104004	Adnan Mohammed S				
5.	411521104005	Akash Jebaraj I				
6.	411521104006	Annamalai M				
7.	411521104007	Archana B				
8.	411521104008	Arokia Anushya A	AB			
9.	411521104009	Arul Pandian P				
10.	411521104010	Ashwin V				
11.	411521104011	Bargavi A V				
12.	411521104012	Bhuvanesh G				
13.	411521104013	Chandrakala V				
14.	411521104014	Chandru B S				
15.	411521104015	Damodaren V				

16.	411521104016	Dayana M				
17.	411521104017	Deepak J				
18.	411521104018	Deepak Kumar K				
19.	411521104019	Deepan M				
20.	411521104020	Deepan Chakkaravarthi K				
21.	411521104021	Devakumari S				
22.	411521104022	Devatharshini B				
23.	411521104023	Dhanush V				
24.	411521104024	Dhanush Vel Nidhi M				
25.	411521104025	Dharani T				
26.	411521104026	Dinesh V				
27.	411521104027	Dinesh Chaudhary D				
28.	411521104028	Dinesh Kumar L				
29.	411521104029	Dinesh Kumar M				
30.	411521104030	Dinesh Kumar S				
31.	411521104031	Divya S				
32.	411521104032	Elakiya K				
33.	411521104033	Elakya R				
34.	411521104034	Franklin Joshwa S				
35.	411521104035	Gayathri B				
36.	411521104036	Gokul D				
37.	411521104037	Gokul R				

38.	411521104038	Gowsalya D				
39.	411521104039	Guberan T				
40.	411521104040	Hari Krishnan U				
41.	411521104041	Harini M				
42.	411521104042	Harish S				
43.	411521104044	Ishasri P				
44.	411521104045	Jagan M				
45.	411521104046	Jana R				
46.	411521104047	Jeffrin Nelson J				
47.	411521104048	Jitto M				
48.	411521104050	Jogan Roy K				
49.	411521104051	Karthi S				
50.	411521104052	Karthika E				
51.	411521104053	Karthikeyan N				
52.	411521104054	Kavitha S				
53.	411521104055	Kavitha V				
54.	411521104056	Keerthika M				
55.	411521104057	Keerthivasan S				
56.	411521104058	Kowsalya B				
57.	411521104059	Lakshmi Priya M				
58.	411521104060	Lavanya B				
59.	411521104301	Anitha M				

60.	411521104302	Arun				
61.	411521104303	Baskar C				
62.	411521104304	Christoper Daniel				
63.	411521104305	Dhivakar M				
64.	411521104306	Harish P				
65.	411521104309	MadanKishore				
66.	411521104311	Pradeep Raj				
67.	411521104312	Praveen V				
68.	411521104701	Mohamed sirajuddin				
69.	411521104061	Lavanya P				
70.	411521104063	Little Jacob P				
71.	411521104064	Madhumitha S				
72.	411521104065	Mageswari D.				
73.	411521104066	Maha Lakshmi M				
74.	411521104067	Maluni B				
75.	411521104068	Mariya Joshwa S				
76.	411521104069	Meenatshigunavathi R				
77.	411521104070	Mohammmed Abdul Rahim P				
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87.	411521104082	Poojasree A				
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119.	411521104086	Pugazhendhi J				
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121.	411521104088	Rahul A.D				
122.	411521104080	Pavithra U				
123.	411521104081	Pooja B.				
124.	411521104082	Poojasree A				

Co-ordinator **HOD**

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE: 24/03/2023

Name of the Student: Ljuberan. T
Register No: 411521104039
Year/Semester IV / VIII
Course Code: CSA014
Course Name: Artificial Intelligence and Data science.

1. What is your assessment of the course material?

Assessment of the Course material is too good. Easily Understanable.

2. How effective was the instructor's delivery of the content?

Instructor's delivers the content very briefly. I understand clearly about this course how can create impact in future

3. Rate the overall quality of the program.

Excellent (5 star.)

4. Would you suggest this program to your peers or underclassmen?

Yes.

5. Suggestions for enhancement, if any:

Signature of the Student

Ljuberan. T.

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CORPORATE
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INSTITUTE OF TECHNOLOGY

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

(Approved by AICTE, Affiliated to Anna University & Accredited by NAAC)
PERI Knowledge Park, Mannivakkam, Chennai-600048, Tamilnadu, India.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

OF PARTICIPATION

This is to certify that Mr/~~Ms~~ Abinash S *of* IV *year Computer Science and Engineering from* ***PERI Institute of Technology*** *for recognition of his/her efforts in completing the* 5 *days Workshop on* **"ARTIFICIA INTELLIGENCE AND DATA SCIENCE "** *from* **21/032023 TO 24/03/2023** *.We appreciate his/her dedication for completing all the tasks assigned during the period of the workshop.*

DR.R.PALSON KENNEDY
PRINCIPAL
PERI ITITUTE OF TECHNOLOGY

DR.B.EZHILAVAN
FOUNDER & CEO
VEI TECHNOLOGIES
PVT LIMITED

VEI
VEI TECHNOLOGIES
PVT LIMITED
WE DESIGN FOR FUTURE TECHNOLOGIES
CORPORATE
61515598827ee163272028

68

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(Approved by AICTE, Affiliated to Anna University & Accredited by NAAC)
PERI Knowledge Park, Mannivakkam, Chennai-600048, Tamilnadu, India.

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

OF PARTICIPATION

This is to certify that Mr/Ms Dharani .T *of* II *year Computer Science and Engineering from* ***PERI Institute of Technology*** *for recognition of his/her efforts in completing the* 5 *days Workshop on* **"ARTIFICIA INTELLIGENCE AND DATA SCIENCE "** *from* **21/032023 TO 24/03/2023** *.We appreciate his/her dedication for completing all the tasks assigned during the period of the workshop.*

DR.R.PALSON KENNEDY
PRINCIPAL
PERI ITITUTE OF TECHNOLOGY

DR.B.EZHILAVAN
FOUNDER & CEO
VEI TECHNOLOGIES
PVT LIMITED

PERI
INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /CSE/CC/2022-2023/03 **Date: 13-03-2023**

CIRCULAR

The Department of Computer Science and Engineering is planning to conduct a program titled "Workshop on Artificial Intelligence" for the Academic Year 2022 – 2023. II year Computer Science and Engineering students are directed to attend the program.

S.No.	Year	Scheduled Date	Time
1	II	25/03/2023 -30/3/2023	8.30 AM to 3.30 PM

Co-ordinator **Head of the Department**

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members – CSE Staffs
5. Main – Notice Board

14-03-2023

Chennai

From

Mrs.Varalakshmi

Assistant Professor

Department of Computer Science and Engineering

PERI Institute of Technology

Chennai

To

The Principal

PERI Institute of Technology

Chennai

Sir,

[Sub: Approval to conduct program on Workshop on Artificial Intelligence– Reg.]

Department of Computer Science and Engineering is planning to conduct program titled "**Workshop on Artificial Intelligence**" training for II Year Computer Science and Engineering students. Kindly accord permission for conducting the program.

S.No.	Year	Scheduled Date	Time
1	II	25/03/2023 -30/3/2023	8.30 AM to 3.30 PM

Thanking You

Yours Truly

Mrs.Varalakshmi

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

AGENDA OF THE MEETING

Course Code: CSA015 **Year:II year**

Course Name:Artificial Intelligence **Session: FN & AN**

Particulars	Session	Topic covered
DATE: 25/03/2023 TO 30/3/2023 **VENUE: CONFERENCE HALL**	FN & AN	**Module 1: Introduction to Artificial Intelligence** Introduction to AI-Intelligent Agents: Types of agents, problem-solving approaches (search algorithms, game playing)-Knowledge Representation and Reasoning-Machine Learning Fundamentals.
	FN & AN	**Module 2: Advanced Machine Learning** Deep Learning-Introduction to artificial neural networks, applications in image recognition and natural language processing.-Ensemble.
	FN & AN	**Module 3: Methods toAdvanced Machine Learning** Methods: Random forests, boosting techniques for improved model performance-Reinforcement Learning: Learning through trial and error, applications in robotics and game playing-Explainable AI (XAI): Understanding how AI models make decisions
	FN & AN	**Module 4 :Text Analysis in AI** Natural Language Processing (NLP): Text analysis, sentiment analysis, chatbot development.-Computer Vision: Image processing, object recognition, applications in robotics
	FN & AN	**Module 5: Applications and Ethics of AI** Applications of AI in various domains (e.g., healthcare, finance, marketing)Ethical Considerations in AI: Bias, fairness, transparency, and societal impact.

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Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Students Name List for Artificial Intelligence & Data Science (24/03/2023 -30/3/2023)

S..No.	Register Number	Name of the Student
1.	411522104007	AYESHA K
2.	411522104008	BALAMURUGAN C
3.	411522104009	BASHINI M
4.	411522104010	BHARATH E
5.	411522104011	BHARATHI P
6.	411522104012	BHUVANA K
7.	411522104013	BRINDHA G
8.	411522104014	CHINNASAMY S
9.	411522104015	DEVASURYA S
10.	411522104017	DHASVANTH KUMAR B R
11.	411522104018	DHINESH M
12.	411522104019	DINESH KUMAR K
13.	411522104020	DINESH RAM S
14.	411522104021	DIVAKAR K
15.	411522104022	DIVYA M
16.	411522104023	DIVYA DHARSHINI A
17.	411522104024	ESHWANTH B
18.	411522104025	EZHILMOZHI M S

19.	411522104026	GIRIDHARAN M
20.	411522104027	GOBI SUNDAR R
21.	411522104028	GOKUL G
22.	411522104029	GOKULRAJ A
23.	411522104030	HARINI PRIYA S
24.	411522104033	HARISRI R
25.	411522104034	HARSHA S G
26.	411522104035	JAGANTHAN P
27.	411522104036	JANA PRIYANKA P
28.	411522104037	JAYASHREE M
29.	411522104007	AYESHA K
30.	411522104008	BALAMURUGAN C
31.	411522104009	BASHINI M
32.	411522104010	BHARATH E
33.	411522104011	BHARATHI P
34.	411522104012	BHUVANA K
35.	411522104013	BRINDHA G
36.	411522104014	CHINNASAMY S
37.	411522104015	DEVASURYA S
38.	411522104040	JENIFER B
39.	411522104041	JESHEEBA FATHIMA M
40.	411522104042	JOTHIKA S
41.	411522104043	JOYCE DEVA KIRUBAI A
42.	411522104044	KALAIMARAN
43.	411522104045	KALAIVANI S

44.	411522104046	KALPANA SRI E
45.	411522104047	KARAN RAJ S
46.	411522104049	KAVYA J
47.	411522104050	KAVYA S
48.	411522104051	KAWIN V B
49.	411522104054	KRISHNAN S
50.	411522104055	LAVANYA M
51.	411522104056	LITHESH T.S
52.	411522104057	LOGESH M
53.	411522104058	LOGESH KUMAR C N
54.	411522104060	MADHUMITHA M
55.	411522104061	MADHUMITHA S
56.	411522104062	MOHAMEED IDRIS M
57.	411522104064	MONISHA P
58.	411522104065	MONISHA S.S
59.	411522104040	JENIFER B
60.	411522104041	JESHEEBA FATHIMA M
61.	411522104042	JOTHIKA S
62.	411522104043	JOYCE DEVA KIRUBAI A
63.	411522104044	KALAIMARAN
64.	411522104045	KALAIVANI S
65.	411522104046	KALPANA SRI E
66.	411522104047	KARAN RAJ S
67.	411522104049	KAVYA J
68.	411522104050	KAVYA S

69.	411522104051	KAWIN V B
70.	411522104054	KRISHNAN S
71.	411522104055	LAVANYA M
72.	411522104056	LITHESH T.S
73.	411522104057	LOGESH M
74.	411522104058	LOGESH KUMAR C N
75.	411522104060	MADHUMITHA M
76.	411522104061	MADHUMITHA S
77.	411522104062	MOHAMEED IDRIS M
78.	411522104064	MONISHA P
79.	411522104065	MONISHA S.S
80.	411522104066	MUGESH ADHITHYA A
81.	411522104068	NANCY S
82.	411522104078	PERIYANNAN C
83.	411522104080	PRAJAN E
84.	411522104106	SREEMATHI S
85.	411522104114	THAMAYANDHI M
86.	411522104001	AAKASH J.
87.	411522104002	AKASH KUMMAR I
88.	411522104016	DHARSHINI S
89.	411522104031	HARIPRIYA M.
90.	411522104032	HARISH A.
91.	411522104048	KARTHIKA R.
92.	411522104052	KEERTHIGA N.
93.	411522104059	MADHAN KUMAR P.

94.	411522104063	MONICA B
95.	411522104067	NAGALAKSHMI V
96.	411522104069	NANDHINI S.
97.	411522104070	NARMADHA S
98.	411522104071	NAVEENA U.
99.	411522104072	NAVEEN KUMAR M
100.	411522104073	NAVEEN RAJ D
101.	411522104074	PAVITHRA M.
102.	411522104075 (221211)	PAVITHRA S.
103.	411522104076 (221481)	PAVITHRA S.
104.	411522104077	PERARULALAN V
105.	411522104079	POORNA CHANDRA D
106.	411522104081	PREETHI S
107.	411522104082	PREMCHAND P.
108.	411522104083	PRIYA S
109.	411522104084	PRIYADHARSHINI R
110.	411522104085	REVATHI V.
111.	411522104086	RITHIKA L
112.	411522104087	ROHIT K.
113.	411522104088	ROHIT RAM H
114.	411522104089	ROOBA KUMAR V K
115.	411522104090	SAGAYAMADISH A
116.	411522104091	SANGEETHA S
117.	411522104092	SANJAY K.

118.	411522104093	SANJAY S
119.	411522104094	SANTHOSH A.
120.	411522104095	SATHISH S
121.	411522104096	SATHISH KUMAR M
122.	411522104097	SATHIYARAJ D.
123.	411522104098	SAYED SALMAN S
124.	411522104099	SCHOLASTICA B
125.	411522104100	SHAILESHWARAN A.V.K.
126.	411522104101	SHALINI V P
127.	411522104102	SHANTHEEP P
128.	411522104103	SIBHI D.

Co-ordinator

HOD

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048

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INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance Report for Artificial Intelligence & Data Science (24/03/2023 -30/3/2023)

S..No.	Register Number	Name of the Student	25.03.23	27.03.23	28.03.23	29.03.23	30.03.23
1.	411522104007	AYESHA K					
2.	411522104008	BALAMURUGAN C					
3.	411522104009	BASHINI M					
4.	411522104010	BHARATH E					
5.	411522104011	BHARATHI P					
6.	411522104012	BHUVANA K					
7.	411522104013	BRINDHA G					
8.	411522104014	CHINNASAMY S					
9.	411522104015	DEVASURYA S					
10.	411522104017	DHASVANTH KUMAR B R					
11.	411522104018	DHINESH M					
12.	411522104019	DINESH KUMAR K					
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14.	411522104021	DIVAKAR K					
15.	411522104022	DIVYA M					
16.	411522104023	DIVYA DHARSHINI A					
17.	411522104024	ESHWANTH B					
18.	411522104025	EZHILMOZHI M S					

19.	411522104026	GIRIDHARAN M					
20.	411522104027	GOBI SUNDAR R					
21.	411522104028	GOKUL G					
22.	411522104029	GOKULRAJ A					
23.	411522104030	HARINI PRIYA S					
24.	411522104033	HARISRI R					
25.	411522104034	HARSHA S G					
26.	411522104035	JAGANTHAN P					
27.	411522104036	JANA PRIYANKA P					
28.	411522104037	JAYASHREE M					
29.	411522104007	AYESHA K					
30.	411522104008	BALAMURUGAN C					
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34.	411522104012	BHUVANA K					
35.	411522104013	BRINDHA G					
36.	411522104014	CHINNASAMY S					
37.	411522104015	DEVASURYA S					
38.	411522104040	JENIFER B					
39.	411522104041	JESHEEBA FATHIMA M					
40.	411522104042	JOTHIKA S					
41.	411522104043	JOYCE DEVA KIRUBAI A					
42.	411522104044	KALAIMARAN					
43.	411522104045	KALAIVANI S					

44.	411522104046	KALPANA SRI E					
45.	411522104047	KARAN RAJ S					
46.	411522104049	KAVYA J					
47.	411522104050	KAVYA S					
48.	411522104051	KAWIN V B					
49.	411522104054	KRISHNAN S					
50.	411522104055	LAVANYA M					
51.	411522104056	LITHESH T.S					
52.	411522104057	LOGESH M					
53.	411522104058	LOGESH KUMAR C N					
54.	411522104060	MADHUMITHA M					
55.	411522104061	MADHUMITHA S					
56.	411522104062	MOHAMEED IDRIS M					
57.	411522104064	MONISHA P					
58.	411522104065	MONISHA S.S					
59.	411522104040	JENIFER B					
60.	411522104041	JESHEEBA FATHIMA M					
61.	411522104042	JOTHIKA S					
62.	411522104043	JOYCE DEVA KIRUBAI A					
63.	411522104044	KALAIMARAN					
64.	411522104045	KALAIVANI S					
65.	411522104046	KALPANA SRI E					
66.	411522104047	KARAN RAJ S					
67.	411522104049	KAVYA J					
68.	411522104050	KAVYA S					

69.	411522104051	KAWIN V B					
70.	411522104054	KRISHNAN S					
71.	411522104055	LAVANYA M					
72.	411522104056	LITHESH T.S					
73.	411522104057	LOGESH M					
74.	411522104058	LOGESH KUMAR C N					
75.	411522104060	MADHUMITHA M					
76.	411522104061	MADHUMITHA S					
77.	411522104062	MOHAMEED IDRIS M					
78.	411522104064	MONISHA P					
79.	411522104065	MONISHA S.S					
80.	411522104066	MUGESH ADHITHYA A					
81.	411522104068	NANCY S					
82.	411522104078	PERIYANNAN C					
83.	411522104080	PRAJAN E					
84.	411522104106	SREEMATHI S					
85.	411522104114	THAMAYANDHI M					
86.	411522104001	AAKASH J.					
87.	411522104002	AKASH KUMMAR I					
88.	411522104016	DHARSHINI S					
89.	411522104031	HARIPRIYA M.					
90.	411522104032	HARISH A.					
91.	411522104048	KARTHIKA R.					
92.	411522104052	KEERTHIGA N.					
93.	411522104059	MADHAN KUMAR P.					

94.	411522104063	MONICA B					
95.	411522104067	NAGALAKSHMI V					
96.	411522104069	NANDHINI S.					
97.	411522104070	NARMADHA S					
98.	411522104071	NAVEENA U.					
99.	411522104072	NAVEEN KUMAR M					
100.	411522104073	NAVEEN RAJ D					
101.	411522104074	PAVITHRA M.					
102.	411522104075 (221211)	PAVITHRA S.					
103.	411522104076 (221481)	PAVITHRA S.					
104.	411522104077	PERARULALAN V					
105.	411522104079	POORNA CHANDRA D					
106.	411522104081	PREETHI S					
107.	411522104082	PREMCHAND P.					
108.	411522104083	PRIYA S					
109.	411522104084	PRIYADHARSHINI R					
110.	411522104085	REVATHI V.					
111.	411522104086	RITHIKA L					
112.	411522104087	ROHIT K.					
113.	411522104088	ROHIT RAM H					
114.	411522104089	ROOBA KUMAR V K					
115.	411522104090	SAGAYAMADISH A					
116.	411522104091	SANGEETHA S					
117.	411522104092	SANJAY K.					

118.	411522104093	SANJAY S					
119.	411522104094	SANTHOSH A.					
120.	411522104095	SATHISH S					
121.	411522104096	SATHISH KUMAR M					
122.	411522104097	SATHIYARAJ D.					
123.	411522104098	SAYED SALMAN S					
124.	411522104099	SCHOLASTICA B					
125.	411522104100	SHAILESHWARAN A.V.K.					
126.	411522104101	SHALINI V P					
127.	411522104102	SHANTHEEP P					
128.	411522104103	SIBHI D.					

Co-ordinator

HOD

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Mannivakkam, Chennai - 600 048

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE: 28/03/2023

Name of the Student: Bashini . M
Register No: 211522104009
Year/Semester 2nd / 4th
Course Code: CSA015
Course Name: Artificial intelligent

1. What is your assessment of the course material?

The Assessment of the Course material very usefull

2. How effective was the instructor's delivery of the content?

clear content delivered

3. Rate the overall quality of the program.

(five star)

4. Would you suggest this program to your peers or underclassmen?

Yes

5. Suggestions for enhancement, if any:

No, Suggestions.

Signature of the Student

Bashini M

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CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. Rithika L

of II Year, Computer Science and Engineering, PERI Institute of Technology has completed an add on course in **Workshop on Artificial Intelligence** held from **25TH MAR 2023** to **30TH MAR 2023 .**

PRINCIPAL

COURSE COORDINATOR

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Organizes

ADD ON COURSE IN

"WORKSHOP ON ARTIFICIAL INTELLIGENCE"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. Priya . S

of II Year, Computer Science and Engineering, PERI Institute of Technology has completed an add on course in **Workshop on Artificial Intelligence** held from **25TH MAR 2023** to **30TH MAR 2023** .

PRINCIPAL

COURSE COORDINATOR

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /ECE/Add-On Course/2022-23/01 **Date: 10.01.2023**

CIRCULAR

The Electronics and Communication Engineering Department of PERI IT has planned to conduct Add-on course titled "ROBOTICS AND ITS APPLICATION" for the Academic Year 2022 – 2023 for IV year ECE students.

S.No.	Year	Scheduled Date	Session 1	Session 2
1	IV	25.02.2023- 08.04.2023	8.30 AM to 11.45AM	12.30PM to 2.00PM

10.1.23

Co-ordinator

Head of the Department

Head of the Department
ELECTRONICS AND COMMUNICATION ENGINEERING
PERI INSTITUTE OF TECHNOLOGY
CHENNAI - 600 048.

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members
5. Notice Board

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Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting for Add-On Course-Robotics and its Application ECA022

Venue: HOD Room, Beta Block ,PERI

Date:13/01/2023 Time:1200-1.00PM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Dr.M.Ramkumar prabhu,HOD/ECE
2. Mr.S.Prabakaran, IVW Pvt Ltd
3. Ms.S.Dhivya Bharathi, Co-ordinator
4. Dr.G.Charulatha,Associate Professsor, ECE

Ms.S.Dhivya bharathi Coordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1:Syllabus preparation for Robotics and its Application.

The syllabus is framed accordingly inorder to meet the objectives of the course,various Universities,IITs,NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessment will be conducted at the end of the course

Coordinator **Senior faculty member** **HOD/ECE** **PRINCIPAL**

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SHORT DESCRIPTION

Course Code: EC A022

Course Name: Robotics and its Application

Robotics,design,construction and use of machines(robots) to perform tasks done traditionally by human beings. Robotics are widely used in such industries as automobile manufacture to perform simple repetitive tasks, and in industries where work must be performed in environments hazardous to humans.

COURSE OBJECTIVES

- To understand the basic concepts associated with the design,functioning,applications and social aspects of robots.To study about the electrical drive systems and sensors used in robotics for various applications.
- To learn about analyzing robot kinematics,dynamics through different methodologies and study various design aspects of robot arm manipulator ad end-effector.
- To learn about various motion planning techniques and the associated control architecture.
- To understand the implications of AI and other trending concepts of robotics.

COURSE OUTCOMES:

- Explain the concepts of industrial robots in terms of classification,specifications and coordinate systems,along with the need and application of robots and automation.
- Examine different sensors and actuators for applications like maze solving and self driving cars.
- Design a 2R robot & an end effector and solve the kinematics and dynamics of motion for robots.
- Explain navigation and path planning techniques along with the control architectures adopted for robot motion planning.
- Describe the impact and progress in AI and other research trends in the field of robotics.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SYLLABUS

MODULE I:FOUNDATION FOR BEGINNERS

Introduction-brief history,definition,anatomy,types,classification,specification and need based applications;role and need of robots for the immediate problem of the society.future mankind and automation ethical issues.

MODULE II: BUILDING BLOCKS OF A ROBOT

Types of electric motors-DC,servo,Stepper; specification,drives for motor-speed & direction control and circuitry,Selection criterion for actuators,direct drives,non-traditional actuators;Sensors for localization,navigation,obstacle avoidance and path planning in known and unknown environments-optical,inertial,thermal,chemical,biosensor and other common sensors;Case study on choice of sensors and actuators for maze solving robot ans self driving cars.

MODULE III: KINEMATICS,DYNAMICS & END- EFFECTORS

Robot kinematics-Geometric approach for 2R,3R manipulators,homogeneous transformation using D-H representation,kinematics of WMR,Lagrangian formulation for 2R robot dynamics;Mechanical design aspects of a 2 R manipulator,WMR;End -Effector-common types and design case study.

MODULE IV: NAVIGATION,PATH PLANNING AND CONTROL ARCHITECTURE

Mapping & Navigation-SLAM,Path planning for serial manipulators,types of control architectures-Cartesian control,Force Control and hybrid position/force control,Behaviour based control,application of Neural network,fuzzy logic,optimization algorithms for navigation problems ,programming methodologies of a robot.

MODULE V: AI AND OTHER RESEARCH TRENDS IN ROBOTICS

Application of Machine Learning-AI,Expert systems;Tele- robotics and virtual reality,Micro & Nano robots,Unmanned vehicles,Cognitive robotics,Evolutionary robotics,Humanoids.

Coordinator

HOD/ECE

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TIME TABLE

Course Code: EC A022 **Year/Semester:IV/VIII**

Course Name: Robotics and its Application **Session: FN& AN**

S.No	DATE	HOURS	TOPIC
1	25.02.23	1st-6th	Introduction-brief history,definition,anatomy,types,classification,specification and need based appplications,role and need of robots for the immediate problem of the society.future mankind and automation ethical issues.
2	11.03.23	1st-6th	Types of electric motors-DC,servo,Stepper; specification,drives for motor-speed & direction control and circuitry,Selection criterion for actuators,direct drives,non-traditional actuators
3	18.03.23	1st-6th	Sensors for localization,navigation,obstacle avoidance and path planning in known and unknown environments-optical,inertial,thermal,chemical,biosensor and other common sensors;Case study on choice of sensors and actuators for maze solving robot ans self driving cars
4	25.03.23	1st-6th	Robot kinematics-Geometric approach for 2R,3R manipulators,homogenous transformation using D-H representation,kinematics of WMR,Lagrangian formulation for 2R robot dynamics;Mechanical design aspects of a 2 R manipulator,WMR.
5	01.04.23	1st-6th	End -Effector-common types and design case study.Mapping & Navigation-SLAM,Path planning for serial manipulators,types of control architecturesCartesian control,Force Control and hybrid position/force control,Behaviour based control,application of Neural network,fuzzy logic
6	08.04.23	1st-6th	Optimization algorithms for navigation problems ,programming methodologies of a robot,Application of Machine Learning-AI,Expert systems;Tele-robotics and virtual reality,Micro & Nanorobots,Unmanned vehicles,Cognitive robotics,Evolutionary robotics,Humanoids

Coordinator **HOD/ECE**

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
ACADEMIC YEAR 2022-2023
IV/ECE

S.NO	REGISTER NO	NAME OF THE STUDENT
1	411519106001	AKASH S
2	411519106002	BAGAVATH.P
3	411519106003	CHANDRU S
4	411519106004	DESULUGIRI KODANDARAMI REDDY
5	411519106005	DINESH V
6	411519106006	GOLDA FAITH T
7	411519106007	HARISH R
8	411519106009	KARTHICKKUMAR M
9	411519106010	KAVIPRIYA M
10	411519106011	KAVIYA E S
11	411519106012	KEERTHI R
12	411519106013	KARTHEEK VARMA K
13	411519106015	MERLIN P
14	411519106016	MUGILAN K
15	411519106017	PRAKRUTHI M A
16	411519106018	PRAVEEN RAJ T
17	411519106019	RAVI KUMAR V
18	411519106020	SANGEETHA V
19	411519106021	SARVEPALLI DEEPAK
20	411519106022	SASI KUMAR S
21	411519106023	SHAJITHABARVEEN S
22	411519106024	SHALINI D
23	411519106025	SNEGA S
24	411519106026	SWARNA C R
25	411519106027	VELAN S
26	411519106028	VINOTH KUMAR R
27	411519106301	ARUN PRASATH V
28	411519106302	MATHESH G
29	411519106303	RAGUL P
30	411519106304	VISWANATH E

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
Attendance Report-Robotics and its Application

S.NO	REG. NO.	NAME OF THE STUDENT	25.02.23	11.03.23	18.03.23	25.03.23	01.04.23	08.04.23
1	411519106001	AKASH S						
2	411519106002	BAGAVATH.P						
3	411519106003	CHANDRU S						
4	411519106004	DESULUGIRI KODANDARAMI REDDY						
5	411519106005	DINESH V						
6	411519106006	GOLDA FAITH T						
7	411519106007	HARISH R						
8	411519106009	KARTHICKKUMAR M						
9	411519106010	KAVIPRIYA M						
10	411519106011	KAVIYA E S						
11	411519106012	KEERTHI R						
12	411519106013	KARTHEEK VARMA K						
13	411519106015	MERLIN P						
14	411519106016	MUGILAN K						
15	411519106017	PRAKRUTHI M A						
16	411519106018	PRAVEEN RAJ T						
17	411519106019	RAVI KUMAR V						
18	411519106020	SANGEETHA V						
19	411519106021	SARVEPALLI DEEPAK						
20	411519106022	SASI KUMAR S						
21	411519106023	SHAJITHABARVEEN S						
22	411519106024	SHALINI D						
23	411519106025	SNEGA S						
24	411519106026	SWARNA C R						
25	411519106027	VELAN S						
26	411519106028	VINOTH KUMAR R						

27	411519106301	ARUN PRASATH V	Arun.V	Arun.V	Arun.V	Arun.V	Arun.V	Arun.V
28	411519106302	MATHESH G	Mathesh.G	Mathesh.G	Mathesh.G	Mathesh.G	Mathesh.G	Mathesh.G
29	411519106303	RAGUL P	Ragul.P	Ragul.P	Ragul.P	Ragul.P	Ragul.P	Ragul.P
30	411519106304	VISWANATH E	Vishw	Vishw	Vishw	Vishw	Vishw	Vishw
PRESENT			30	30	30	30	30	30
ABSENT			NIL	NIL	NIL	NIL	NIL	NIL

8/4/23

Co-ordinator

8/4/23

HOD/ECE

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
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Mannivakkam, Chennai - 600 048.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: DINESH.V

Register No: 411519106005

Year: IV

Date of Feedback: 08/04/2023

Course Name: ROBOTICS AND ITS APPLICATION

1. How do you value the course content?

The course that explains the way Robotics build. in Future.

2. How would you understand the content delivery by the instructor?

The content, the instructor explained is understand. clearly, the way he explain it practically is so knowledgeable.

3. Write the overall quality of the program

By my side of feedback of quality about Robotics is 100%.

4. Will you recommend this program to your friends/juniors/seniors?

Yes, I recommend this program to my friends

Suggestions to improve,if any:

Nil

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: velan . S Register No: 411519106027

Year: IV Date of Feedback: 8/4/2023

Course Name: Robotics and its application

1. How do you value the course content?

This Course detaily explained abaut robotics.

2. How would you understand the content delivery by the instructor?

Instaructor explained the Content very Clearly about its function and uses.

3. Write the overall quality of the program

we have clear concept about robotics and its applications.

4. Will you recommend this program to your friends/juniors/seniors?

Yes, I recommend this program to my faiends.

Suggestions to improve,if any:

NO

S. velan

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Shalini . D Register No: 411519106024

Year: IV Date of Feedback: 8/4/2023

Course Name: Robotics and its application

1. How do you value the course content?

The value of course content is very interactive session.

2. How would you understand the content delivery by the instructor?

The content delivery by the instructor, application and also clearly understand for that robotics are used.

3. Write the overall quality of the program

According to me it my point of view overall quality of the program is good.

4. Will you recommend this program to your friends/juniors/seniors?

Yes. I will recommend this program to my friends.

Suggestions to improve,if any:

-

Shalini. D

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY

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FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Kavi priya . M Register No: 411519106010

Year: IV Date of Feedback: 08-04-23

Course Name: Robotics & it's Application

1. How do you value the course content?

The value of the course content is more expensive and clearly understable.

2. How would you understand the content delivery by the instructor?

The content delivery of the instructor Applica and also clearly understand for where that robotics are us

3. Write the overall quality of the program

The quality of the program is, in this generation mostly used and also used future scope

4. Will you recommend this program to your friends/juniors/seniors?

yes. ofcourse. I will definetely recommend this course. This is very valuable course

Suggestions to improve,if any:

Not yet clearly I understand and easy to learn.

M. Kavipriya

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASSESSMENT ON
ROBOTICS AND ITS APPLICATION

1). The robots with the designation TRI are known as _____ robots?

Spherical
Articulated
Both a and b
None of the above

2). How many sections does robot manipulator consists of?

One
Two
Three
Four

3). Which one of the following generation robots are remote controlled?

First
Second
Third
None of the above

4). What is the standard form of DOF?

Degree of Finance
Degree of Freedom
Degree of Fail
None of the above

5). The study of motion without regard to forces is known as _____?

Kinematics
Dynamics
Actuator
Sensor

6). Which one of the following robots also called spherical robot?

SCARA
Delta
Polar
None of the above

7). Which one of the following robots comes under first generation?

Information robots
Autonomous loading
Autonomous harvesting
None of the above

8). Which one of the following engineering deals with machinery and structure of robots?

Electrical
Mechanical
Computer
All of the above

9). _____ is an example for simple level robots?

Washing machine
Fully automatic washing machine
Laptop
None of the above

10). The robots with the designation TRR is known as _____ robots?

Spherical
Articulated
Both a and b
None of the above

11). The dynamic robots are categorized into _____ types?

One
Two
Three
Four

12). What is the standard form of ZMP?

Zero Memory Point
Zero Momentum Point
Zero Main Point
None of the above

13). The joints of the robots are categorized into _____ types?

One
Two
Three
None of the above

14). Which one of the following sections in robot manipulator used for positioning?

Body & arm
Wrist assembly
Both a and b
None of the above

15). The study of motion with regard to forces is known as _____?

Kinematics
Dynamics
Actuator
All of the above

16). How many categories of sensors are used in industrial robots?

One
Two
Three
Four

17). What is the standard form of FCAW?

Flux Common Arc Welding
Flux Cored Arc Welding
First Cored Arc Welding
None of the above

18). What are the advantages of robots?

Don't need experience
Cost lot of money
Need a huge power supply
Replace human workers

19). The robots are categorized into _____ types based on control system?

One
Two
Three
None of the above

20). Which one of the following joints comes under translational motion?

Orthogonal Joint
Rotational Joint
Twisting Joint
None of the above

21). Which one of the following robots is based on physical configuration?

SCARA
Point to point
Controlled path
Continuous path

22). Which one of the following robots with two prismatic joints?

Cartesian
Cylindrical
Articulated
None of the above

23). What are the advantages of SCARA?

Limited applications
Two ways to reach point
Highly complex
High speed

24). Which one of the following commonly used for weld sealing?

Cartesian
Articulated
Cylindrical
None of the above

25). What are the advantages of articulated robots?

All joints can be sealed from the environment
Low accuracy
Restricted volume coverage
Extremely difficult to visualize

26). What is the standard form of LRC?

Locked Room Code
Locked Rotor Code
Last Rotor Code
None of the above

27). Which one of the following is flexible and easy to use?

Robot
Cobot
Both a and b
None of the above

28). In which one of the following, minimum integrations is required?

Robot

Cobot

Both a and b

None of the above

29). Which one of the following robots commonly used for handling at die casting machine?

Cylindrical

Cartesian

Both a and b

None of the above

30). How many types of robotic joints are there?

Five

Two

Three

None of the above

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"ROBOTICS AND ITS APPLICATION"

CERTIFICATE OF PARTICIPATION

This is to certify that ~~Mr~~ / Ms. KAVIYA E.S

of Final Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ROBOTICS AND ITS APPLICATION** held from 25.02.2023 to 08.04.2023.

PRINCIPAL **COURSE COORDINATOR**

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ADD ON COURSE IN

"ROBOTICS AND ITS APPLICATION"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / ~~Ms~~. PRAVEEN RAJ T

of Final Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ROBOTICS AND ITS APPLICATION** held from 25.02.2023 to 08.04.2023.

PRINCIPAL **COURSE COORDINATOR**

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"ROBOTICS AND ITS APPLICATION"

CERTIFICATE OF PARTICIPATION

This is to certify that ~~Mr~~ / Ms. SHALINI. D

of Final Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ROBOTICS AND ITS APPLICATION** held from 25.02.2023 to 08.04.2023.

PRINCIPAL **COURSE COORDINATOR**

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /ECE/Add-On Course/2022-23/02 **Date: 10.01.2023**

CIRCULAR

The Electronics and Communication Engineering Department of PERI IT has planned to conduct Add-oncourse titled "ADVANCE JAVA PROGRAMMING" for the Academic Year 2022 – 2023 for III year ECE students.

S.No.	Year	Scheduled Date	Session 1	Session 2
1	III	25.02.2023 -01.04.2023	8.30 AM to 11.45AM	12.30PM to 2.00PM

10.1.23

Co-ordinator

Head of the Department

Head of the Department
ELECTRONICS AND COMMUNICATION ENGINEERING
PERI INSTITUTE OF TECHNOLOGY
CHENNAI - 600 048.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting for Add-On Course-ECA023-Advanced Java Programming

Venue: HOD Room, Beta Block ,PERI

Date:13/01/2023 Time:1200pm-1.00pm

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Dr.M.Ramkumar Prabhu,HOD/ECE
2. Mr.Azar,Prince Infotech.
3. Ms.S.Dhivya Bharathi, Co-ordinator
4. Dr.G.Charulatha,Associate Professsor, ECE

Ms.S.Dhivya bharathi Coordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1:Syllabus preparation for Advanced Java Programming.

The syllabus is framed accordingly inorder to meet the objectives of the course,various Universities,IITs,NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessment will be conducted at the end of the course

Coordinator **Senior faculty member** **HOD/ECE** **PRINCIPAL**

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SHORT DESCRIPTION

Course Code: EC A023

Course Name: Advanced Java Programming

Java is a widely used object-oriented programming language abd software platform that bruns on billions of devices, including notebook computers, mobile devices, gaming consoles, medical devices and many others.The rules and syntax of Java are based on the C and C++ languages.

COURSE OBJECTIVES

- To provide an overview of working principles of internet, web related functionalities.
- To understand and apply the fundamentals core java, packages, database connectivity for computing.
- To enhance the knowledge to server side programming
- To understand the OOPS concept & how to apply in programming.

COURSE OUTCOMES:

- Implement Java Programs.
- Make use of hierarchy of Java classes to provide a solution to a given set of requirements found in the Java API.
- Use the frameworks JSP, Hibernate, Spring.
- Design and implement server side programs using Servlets and JSP.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SYLLABUS

MODULE I:JAVA FUNDAMENTALS

Java features-Java Platform-Java Fundamentals-Expressions,Operators,and Control Structures-Classes,Methods-inheritance-Packages and Interfaces-Boxing,Unboxing-Variable-Length Arguments(Varargs),Exception Handling.

MODULE II: COLLECTIONS AND ADVANCE FEATURES

Utility packages,Introduction to Collection-Hierarchy of collection framework-Generics-Array List,LL,Hashset, Treeset, HashMap- comparators-Java annotations- Premain method.

MODULE III: ADVANCE JAVA PROGRAMMING

Input Output Packages-Inner Classes-Java Database Connectivity-IntroductionJDBC Drivers-JDBC Connectivity with MySQL/Oracle-Prepared Statement & Result Set-JDBC Stored procedures invocation-Servlets-RMI Swing Fundamentals-Swing Classes.

MODULE IV: OVERVIEW OF DATA RETRIEVAL &INTERPRISE APPLICATION DEVELOPMENT

Tiered Application development-Java Servers,containers-Web Container-Creating Web Application using JSP/Servlets-Web Frameworks Introduction to Spring/Play Framework.

MODULE V: JAVA INTERNALS AND NETWORKING

Java jar Files-Introspection-Garbage collection-Architecture and design-GC Cleanup process,Invoking GC,Generation in GC-Networking Basics Java an the Net.

Coordinator

HOD/ECE

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TIME TABLE

Subject Code: EC A023 **Year/Semester:III/VI**

Subject Name: Advanced Java Programming **Session: FN& AN**

S.No	DATE	HOURS	TOPIC
1	25.02.2023	1st-6th	Java features-Java Platform-Java Fundamentals-Expressions,Operators,and Control Structures-Classes,Methods-inheritance-Packages and Interfaces-Boxing,Unboxing-Variable-Length Arguments(Varargs),Exception Handling.
2	11.03.2023	1st-6th	Utility packages,Introduction to Collection-Hierarchy of collection framework-Generics-Array List,LL,Hashset,Treeset,HashMap-comparators-Java annotations-Premain method.
3	18.03.2023	1st-6th	Input Output Packages-Inner Classes-Java Database Connectivity-IntroductionJDBC Drivers-JDBC Connectivity with MySQL/Oracle-Prepared Statement & Result Set-JDBC Stored procedures invocation-Servlets-RMI Swing Fundamentals-Swing Classes
4	25.03.2023	1st-6th	Tiered Application development-Java Servers,containers-Web Container-Creating Web Application using JSP/Servlets-Web Frameworks Introduction to Spring/Play Framework
5	01.04.2023	1st-6th	Java jar Files-Introspection-Garbage collection-Architecture and design-GC Cleanup process,Invoking GC,Generation in GC-Networking Basics Java an the Net.

Coordinator **HOD/ECE**

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
ACADEMIC YEAR 2022-2023
III/ECE

S.NO.	REG. NO	STUDENT NAME
1	411520106001	M. ABINAYA
2	411520106002	P ARAVINTH SANKAR
3	411520106003	K. ARULMANI
4	411520106004	R. ARUNRAJ
5	411520106005	B. ASHWIN
6	411520106006	S BALAJI
7	411520106007	V BALA KRISHNAN
8	411520106008	RAJA HEMACHANDRAN CHANDANA PRIYA
9	411520106009	S CHARUMATHI
10	411520106010	DEVARAPALLI VASANTHI
11	411520106011	K DHAMODARAN
12	411520106012	N. DIVIESH
13	411520106013	P ELIZABETH
14	411520106015	N GOMATHI
15	411520106016	GOTHALA VIKASH
16	411520106017	S. GOWTHAM
17	411520106018	S. HARISHBALAJIKANNA
18	411520106019	R. INDUJAA
19	411520106020	D. JANAKI.
20	411520106021	M. JAYAKUMAR
21	411520106023	OM JAYASHAKTHI
22	411520106024	R KAKA MAGESH BABU
23	411520106025	N KARTHIK
24	411520106026	A. KAVIYA
25	411520106027	A. MANIKANDAN
26	411520106028	M MUGILA
27	411520106029	P. NAVEEN
28	411520106030	S. NIDHEESH RAJ
29	411520106031	R PRADEEP
30	411520106032	A PRADEEP KUMAR
31	411520106033	R. PRATHABA RUTHIRAN
32	411520106034	V SABARINATHAN
33	411520106035	R. SANMUGAPRIYA
34	411520106036	S. SARMITHA
35	411520106037	N SHALINI
36	411520106038	S SIDDIQUE

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
ACADEMIC YEAR 2022-2023
III/ECE

37	411520106039	S SIVAPRAKASH
38	411520106041	V SRINIVASAN
39	411520106042	R SUSMITHA
40	411520106043	V. THATCHAYANI
41	411520106044	C THAVASIRAM
42	411520106045	B. THOLKAPPIYAN
43	411520106046	U UMA MAGESHWARI
44	411520106047	R UPPILI
45	411520106048	VADLAMANI DINESH
46	411520106049	S VIDHYA
47	411520106301	S. BOOPALAN
48	411520106302	G MAGIMAIRAJ
49	411520106303	N SANDHIYA
50	411520106304	R SANJAY
51	411520106305	A. SARAVANA KUMAR
52	411520106306	K SATHISH
53	411520106307	P SWETHA
54	411520106308	P VIGNESH
55	411520106701	A SIVAPRAKASH

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
Attendance Report-Advanced Java Programming

S.NO	REG. NO.	NAME OF THE STUDENT	25.02.23	11.03.23	18.03.23	25.03.23	01.04.23
1	411520106001	M. ABINAYA					
2	411520106002	P ARAVINTH SANKAR					
3	411520106003	K. ARULMANI					
4	411520106004	R. ARUNRAJ					
5	411520106005	B. ASHWIN					
6	411520106006	S BALAJI					
7	411520106007	V BALA KRISHNAN					
8	411520106008	CHANDANA PRIYA					
9	411520106009	S CHARUMATHI					
10	411520106010	DEVARAPALLI VASANTHI					
11	411520106011	K DHAMODARAN					
12	411520106012	N. DIVIESH					
13	411520106013	P ELIZABETH					
14	411520106015	N GOMATHI					
15	411520106016	GOTHALA VIKASH					
16	411520106017	S. GOWTHAM					
17	411520106018	S. HARISHBALAJIKANNA					
18	411520106019	R. INDUJAA					
19	411520106020	D. JANAKI.					
20	411520106021	M. JAYAKUMAR					
21	411520106023	OM JAYASHAKTHI					
22	411520106024	R KAKA MAGESH BABU					
23	411520106025	N KARTHIK					
24	411520106026	A. KAVIYA					
25	411520106027	A. MANIKANDAN					
26	411520106028	M MUGILA					
27	411520106029	P. NAVEEN					
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34	411520106036	S. SARMITHA					
35	411520106037	N SHALINI					
36	411520106038	S SIDDIQUE					
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45	411520106048	VADLAMANI DINESH					
46	411520106049	S VIDHYA					
47	411520106301	S. BOOPALAN					
48	411520106302	G MAGIMAIRAJ					
49	411520106303	N SANDHIYA					
50	411520106304	R SANJAY					
51	411520106305	A. SARAVANA KUMAR					
52	411520106306	K SATHISH					
53	411520106307	P SWETHA					
54	411520106308	P VIGNESH					
55	411520106701	A SIVAPRAKASH					
PRESENT							
ABSENT							

Co-ordinator

HOD/ECE

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Abinaya . M

Register No: 411520106001

Year: III

Date of Feedback: 14/23

Course Name: Advanced Java Programming

1. How do you value the course content?

Most important in Current Generation

2. How would you understand the content delivery by the instructor?

Easy to understand

3. Write the overall quality of the program

Good Content & nice Classes

4. Will you recommend this program to your friends/juniors/seniors?

Yes. I'm recommended Son Friends

Suggestions to improve,if any:

Good

Abinaya. M.

Signature of the Student

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FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Srinivasan V

Register No: 411520106041

Year: III

Date of Feedback: 01/04/2023

Course Name: Advanced Java Programming

1. How do you value the course content?

this course of content is more valuable for future

2. How would you understand the content delivery by the instructor?

the instructor delivery the content very clearly and easy to understand

3. Write the overall quality of the program

the quality of the program is good

4.Will you recommend this program to your friends/juniors/seniors?

Yes. I will recommend the program to all

Suggestions to improve,if any:

No suggestion. It's all good

1/4/23

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Saravana kumar. A

Register No: 411520106305

Year: 3rd

Date of Feedback: 1/4/23

Course Name: Advanced JAVA programming

1. How do you value the course content?

This course of content very useful to the future.

2. How would you understand the content delivery by the instructor?

the instructor delivery the content very clearly and easy to understand.

3. Write the overall quality of the program

The quality of the program is very good.

4. Will you recommend this program to your friends/juniors/seniors?

Yes. I will recommend this program my friends and juniors

Suggestions to improve,if any:

No suggestions. It's all good.

A. Saravana 1/4/23

Signature of the Student

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FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Gomathi.N Register No: 411520106015

Year: III Date of Feedback: 01/4/23

Course Name: Advanced Java Programming

1. How do you value the course content?

Most important in Current Generation

2. How would you understand the content delivery by the instructor?

Easy to understand

3. Write the overall quality of the program

Good content & nice classes

4.Will you recommend this program to your friends/juniors/seniors?

Yes, I'm recommend my friends

Suggestions to improve,if any:

Much Good.

Gom.N

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Naveen . P

Register No: 411520106029

Year: III

Date of Feedback: 01/04/2023

Course Name: Advanced Java Programing

1. How do you value the course content?

The course content is very good.

2. How would you understand the content delivery by the instructor?

It is easy to understant

3. Write the overall quality of the program

quality of the program is Good.

4.Will you recommend this program to your friends/juniors/seniors?

Yes

Suggestions to improve,if any: Nill

P. Naveen.

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASSESSMENT ON ADVANCES JAVA PROGRAMMING

A2
50
07/04/2025

1.What is the full form of JDBC?
A. Java Database Connectivity
B. Java Database Collection
C. Java Data Collection
D. Java Database Component

2.What is the purpose of a PreparedStatement in JDBC?
A. To execute a parameterized SQL query
B. To execute a stored procedure
C. To execute a batch of SQL statements
D. To execute a dynamic SQL query

3.Which interface in Java is used to define the behavior of servlets?
A. ServletContext
B. ServletConfig
C. Servlet
D. HttpServlet

4.Which HTTP method is used to retrieve data from a web server?
A. GET
B. POST
C. PUT
D. DELETE

5.What is the purpose of JSP?
A. To create dynamic web pages
B. To create static web pages
C. To create server-side applications
D. To create client-side applications

6.What is the purpose of a JAR file?
A. To package Java class files and associated metadata into a single file
B. To package HTML, CSS, and JavaScript files into a single file
C. To package images and other media files into a single file
D. To package database files into a single file

7.Which interface is used to handle events in Java?
A. Action Listener
B. Event Listener
C. Mouse Listener
D. Key Listener

8.What is the purpose of the finally block in a try-catch-finally statement?
A. To execute code that must be executed regardless of whether an exception occurs
B. To execute code that must be executed if an exception occurs
C. To execute code that must be executed if no exception occurs
D. To execute code that must be executed before any other code

9.What is the difference between == and equals() method in Java?
A. == compares the object references, while equals() compares the object content
B. equals() compares the object references, while == compares the object content
C. Both compare the object references
D. Both compare the object content

10.What is the purpose of the synchronized keyword in Java?
A. To prevent multiple threads from accessing the same code block simultaneously
B. To allow multiple threads to access the same code block simultaneously
C. To prevent multiple threads from accessing the same variable simultaneously
D. To allow multiple threads to access the same variable simultaneously

11.Which keyword is used to create an interface in Java?
A. class
B. interface
C. abstract
D. implements

12.What is the purpose of the super keyword in Java?
A. To refer to the superclass of a class
B. To refer to the current instance of a class
C. To refer to a static method of a class
D. To refer to a static variable of a class

13.What is the purpose of the static keyword in Java?
A. To create a class-level variable or method
B. To create an instance-level variable or method
C. To prevent a variable or method from being modified
D. To allow a variable or method to be modified

14.Which keyword is used to declare a method that does not return a value?
A. void
B. int
C. boolean
D. double

15.Which data structure in Java is used to implement a stack?
A. LinkedList
B. ArrayList
C. Stack
D. HashSet

16.Which data structure in Java is used to implement a binary search tree?
A. LinkedList
B. ArrayList
C. TreeMap
D. HashSet

17.What is the difference between an abstract class and an interface in Java?
A. An abstract class can have method implementations while an interface can only have method signatures.
B. An interface can have method implementations while an abstract class can only have method signatures.
C. Both abstract classes and interfaces can have method implementations.
D. An abstract class is a blueprint for creating objects while an interface is not.

18.What is the purpose of the finalize() method in Java?
A. To free system resources before an object is garbage collected
B. To free system resources after an object is garbage collected
C. To create a new object before an object is garbage collected
D. To create a new object after an object is garbage collected

19.Which class in Java is used to create and manage threads?
A. Thread
B. Runnable
C. Executor
D. Timer

20.Which exception is thrown when a method is called with illegal arguments?
A. IllegalAccessException
B. IllegalArgumentException
C. InvocationTargetException
D. ClassNotFoundException

21.Which exception is thrown when a method or class is not found?
A. IllegalAccessException
B. IllegalArgumentException
C. InvocationTargetException
D. ClassNotFoundException

22.What is the purpose of the assert keyword in Java?
A. To test whether a condition is true and throw an exception if it is false
B. To test whether a condition is false and throw an exception if it is true
C. To test whether a variable is null and throw an exception if it is not
D. To test whether a variable is not null and throw an exception if it is

23.What is the purpose of the getClass() method in Java?
A. To return the runtime class of an object
B. To return the superclass of a class
C. To return the interface of a class
D. To return the package of a class

24.What is the purpose of the clone() method in Java?
A. To create a copy of an object
B. To create a new instance of a class
C. To create a new instance of an interface
D. To create a new instance of an abstract class

25.Which method is used to read data from a file in Java?
A. read()
B. write()
C. readLine()
D. writeLine()

26.Which class is used to create a server socket in Java?
A. Socket
B. ServerSocket
C. DatagramSocket
D. MulticastSocket

27.Which class in Java is used to handle date and time?
A. Date
B. Time
C. Calendar
D. Timestamp

28.What is the purpose of the java.lang package in Java?
A. To provide fundamental classes and interfaces
B. To provide network-related classes and interfaces
C. To provide GUI-related classes and interfaces
D. To provide database-related classes and interfaces

29.Which keyword is used to prevent a method or variable from being inherited in Java?
A. final
B. static
C. private
D. protected

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Organizes

ADD ON COURSE IN

"ADVANCED JAVA PROGRAMMING"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. CHARUMATHI S

of Third Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ADVANCED JAVA PROGRAMMING** held from 25.02.2023 to 01.04.2023

PRINCIPAL

COURSE COORDINATOR

PERI
INSTITUTE OF TECHNOLOGY

PERI EDUCATION

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ADVANCED JAVA PROGRAMMING"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. SUSMITHA. R

of Third Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ADVANCED JAVA PROGRAMMING** held from 25.02.2023 to 01.04.2023

PRINCIPAL **COURSE COORDINATOR**

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PERI EDUCATION

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ADVANCED JAVA PROGRAMMING"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. NAVEEN. P

of Third Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ADVANCED JAVA PROGRAMMING** held from 25.02.2023 to 01.04.2023

PRINCIPAL **COURSE COORDINATOR**

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /ECE/Add-On Course/2022-23/03 **Date: 16.02.2023**

CIRCULAR

The Electronics and Communication Engineering Department of PERI IT has planned to conduct Add-on course titled "ETHICAL HACKING" for the Academic Year 2022 – 2023 for II year ECE students.

S.No.	Year	Scheduled Date	Session 1	Session 2
1	II	04.03.2023-13.05.2023	8.30 AM to 11.45AM	12.30PM to 2.00PM

16/02/23

Co-ordinator

Head of the Department

Head of the Department
ELECTRONICS AND COMMUNICATION ENGINEERING
PERI INSTITUTE OF TECHNOLOGY
CHENNAI - 600 048.

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3. IQAC
4. Faculty Members
5. Notice Board

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting for Add-On Course-Ethical Hacking-ECA024

Venue: HOD Room, Beta Block ,PERI

Date:20/02/2023 Time:1200-1.00PM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Dr.M.Ramkumar prabhu,HOD/ECE
2. Mr.Azaruddin, Prince Infotech
3. Ms.S.Dhivya Bharathi, Co-ordinator
4. Dr.G.Charulatha ,Associate Professsor, ECE

Ms.S.Dhivya bharathi Coordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1:Syllabus preparation for Ethical Hacking

The syllabus is framed accordingly inorder to meet the objectives of the course,various Universities,IITs,NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessment will be conducted at the end of the course

Coordinator **Senior faculty member** **HOD/ECE** **PRINCIPAL**

Dr. R. PALSON KENNEDY, M.E., Ph.D
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SHORT DESCRIPTION

Course Code: EC A024

Course Name: Ethical Hacking

Ethical hacking involves an authorized attempt to gain unauthorized access to a computer system,application or data.Carrying out an ethical hack involves duplicating strategies and actions of malicious attackers

COURSE OBJECTIVES

- To understsand and analyse information security threats and counter measures
- To perform security auditing and testing
- To understand issue relating to ethical hacking
- To study & employ network defense measures

COURSE OUTCOMES

- Identifying vulnerabilities from a Hacker's perspective Ethical Hackers utilise a unique perspective by adopting the mindset and tactics of malicious Hackers but within a legal framework. ...
- Preventing data breaches and other security incidents .
- Compliance with regulatory standards .
- Enhancing security awareness and training .
- Trust building with customers .

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SYLLABUS

MODULE I: ETHICAL HACKING OVERVIEW & VULNERABILITIES

Understanding the importance of security-Concept of ethical hacking and essential Terminologies Threat-Attack-Vulnerabilities-Target of Evaluation Exploit.Phases involved in hacking.

MODULE II: FOOT PRINTING AND PORT SCANNING

Foot printing-Introduction to foot printing-Understanding the information gathering methodology of the hackers-Tools used for the reconnaissance phase.Port scanning-Introduction-using port scanning tools-Ping sweeps,Scripting Enumeration-Introduction-Enumerating windows OS & Linux OS.

MODULE III: SYSTEM HACKING

Aspect of Remote password guessing-Role of Eavesdropping-Various methods of Password cracking-Keystroke Loggers-Understanding sniffers-Comprehending Active and Passive sniffing-ARP Spoofing-Redirection DNS and IP Sniffing-HTTPS Sniffing

MODULE IV: HACKING WEB SERVICES & SESSION HIJACKING

Web application vulnerabilities-Application Coding errors-SQL Injection into Back end Databases-Cross-site scripting-cross-site request forging, Authentication bypass-Web services and related flaws-Protective http headers, Understanding session Hijacking-Phases involves in Session Hijacking-Types of Session Hijacking-Session Hijacking Tools.

MODULE V: HACKING WIRELESS NETWORKS

Introduction to 802.11-Role of WEP-Cracking WEP Keys-Sniffing Traffic Wireless DOS Attacks-WLAN Scanners-WLAN Sniffers-Hacking Tools-Securing Wireless Network.

Coordinator

HOD/ECE

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TIME TABLE

Course Code: ECA024 **Year/Semester:II/IV**

Course Name: Ethical Hacking **Session: FN& AN**

S.No	DATE	HOURS	TOPIC
1	04.03.23	1st-6th	Understanding the importance of security-Concept of ethical hacking and essential Terminologies Threat-Attack-Vulnerabilities-Target of Evaluation Exploit.Phases involved in hacking
2	08.04.23	1st-6th	Foot printing-Introduction to foot printing-Understanding the information gathering methodology of the hackers-Tools used for the reconnaissance phase.Port scanning- Introduction-using port scanning tools-Ping sweeps,Scripting Enumeration-Introduction-Enumerating windows OS & Linux OS
3	29.04.23	1st-6th	Aspect of Remote password guessing-Role of Eavesdropping-Various methods of Password cracking-Keystroke Loggers-Understanding sniffers-Comprehending Active and Passive sniffing-ARP Spoofing-Redirection DNS and IP Sniffing-HTTPS Sniffing
4	06.05.23	1st-6th	Web application vulnerabilities-Application Coding errors-SQL Injection into Back end Databases-Cross-site scripting-cross-site request forging, Authentication bypass-Web services and related flaws-Protective http headers, Understanding session Hijacking-Phases involves in Session Hijacking-Types of Session Hijacking-Session Hijacking Tools
5	13.05.23	1st-6th	Introduction to 802.11-Role of WEP-Cracking WEP Keys-Sniffing Traffic Wireless DOS Attacks-WLAN Scanners-WLAN Sniffers-Hacking Tools-Securing Wireless Network.

Coordinator

HOD/ECE

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
ACADEMIC YEAR 2022-2023
II/ECE

S.NO.	REG. NO	STUDENT NAME
1	411521106001	AISHWARYA I
2	411521106002	AJAY V
3	411521106003	AKASH T.
4	411521106004	AKASH V.
5	411521106005	ANEES FATHIMA M.
6	411521106006	ARAVIND V
7	411521106007	ARAVINDHAN V
8	411521106008	ARUN R
9	411521106009	ASHUTOSH KUMAR H.
10	411521106010	AVINASH S.
11	411521106011	BALAJI M.
12	411521106012	BHAVAN S.D
13	411521106013	BOOMIKA N.
14	411521106014	DIVYA DARSHAN S.
15	411521106015	DIWAKAR J
16	411521106016	GANESH K.
17	411521106017	GOPAL E.
18	411521106018	HARISH BABU H.
19	411521106019	HEMANATHAN S
20	411521106020	INDHUJA A
21	411521106021	INDHUMATHI N
22	411521106022	ISHWARYA M
23	411521106023	KALAIMATHI P.

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ACADEMIC YEAR 2022-2023
II/ECE

24	411521106024	KAMALESH S
25	411521106025	KANAGAVEL M
26	411521106027	LALITHA V
27	411521106028	LOGAPRASATH P.S
28	411521106029	MALIN S.
29	411521106030	MALINI S
30	411521106031	MINNALA P.
31	411521106032	MOHAMED HAFEEZ H.
32	411521106033	MOHAMMED KHALITH R
33	411521106034	MONISHA A
34	411521106035	MONISHA E
35	411521106036	NARMATHA M
36	411521106037	NAVIN RAJ KUMAR S
37	411521106038	NEHEMYA V
38	411521106039	NETHAJI R
39	411521106041	NOORUL FAMITHA A
40	411521106042	PRATHAP K
41	411521106045	RAGUL S.
42	411521106046	RAMYA U
43	411521106047	RESHMI S
44	411521106048	SAKTHI S
45	411521106051	SHARUK E
46	411521106052	SILAMBARASAN S.
47	411521106053	SUDHAN M

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ACADEMIC YEAR 2022-2023
II/ECE

48	411521106054	SUDHARSHAN K
49	411521106055	SUJITHA S
50	411521106056	SWETHA R.
51	411521106057	SWETHA T.
52	411521106059	THIRUPATHY G
53	411521106060	VIJAYA SRI Y.
54	411521106061	VIMALA P
55	411521106062	VINOTH BHARATHI K
56	411521106302	LOKESH KUMAR R.
57	411521106309	YUVAGIRI R

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ECE
Attendance Report-Ethical Hacking

S.NO	REG. NO.	NAME OF THE STUDENT	04.03.23	08.04.23	29.04.23	06.05.23	13.05.23
1	411521106001	AISHWARYA I					
2	411521106002	AJAY V					
3	411521106003	AKASH T.					
4	411521106004	AKASH V.					
5	411521106005	ANEES FATHIMA M.					
6	411521106006	ARAVIND V					
7	411521106007	ARAVINDHAN V					
8	411521106008	ARUN R					
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10	411521106010	AVINASH S.					
11	411521106011	BALAJI M.					
12	411521106012	BHAVAN S.D					
13	411521106013	BOOMIKA N.					
14	411521106014	DIVYA DARSHAN S.					
15	411521106015	DIWAKAR J					
16	411521106016	GANESH K.					
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19	411521106019	HEMANATHAN S					
20	411521106020	INDHUJA A					
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22	411521106022	ISHWARYA M					
23	411521106023	KALAIMATHI P.					
24	411521106024	KAMALESH S					
25	411521106025	KANAGAVEL M					
26	411521106027	LALITHA V					
27	411521106028	LOGAPRASATH P.S					
28	411521106029	MALIN S.					
29	411521106030	MALINI S					
30	411521106031	MINNALA P.					

31	411521106032	MOHAMED HAFEEZ H.						
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33	411521106034	MONISHA A						
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35	411521106036	NARMATHA M						
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47	411521106053	SUDHAN M						
48	411521106054	SUDHARSHAN K						
49	411521106055	SUJITHA S						
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51	411521106057	SWETHA T.						
52	411521106059	THIRUPATHY G						
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54	411521106061	VIMALA P						
55	411521106062	VINOTH BHARATHI K						
56	411521106302	LOKESH KUMAR R.						
57	411521106309	YUVAGIRI R						
PRESENT			57	57	57	57	57	
ABSENT			—	—	—	—	—	

13/05/23
Co-ordinator

13/05/23
HOD/ECE

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Avinash.S

Register No: 411521106010

Year: Second

Date of Feedback: 13.05.23

Programme Name: ETHICAL HACKING

Date of Programme: 04.03.23

1. How do you value the course content?

The value the Course Content is good.

2. How would you understand the content delivery by the instructor?

Yes, I understood.

3. Write the overall quality of the program

The quality is excellent

4.Will you recommend this program to your friends/juniors/seniors?

Yes

Suggestions to improve,if any: nothing

Signature of the Student

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FEEDBACK FORM-

ACADEMIC YEAR 2022-2023

Name of the Student: Aravind.V

Register No: 006

Year: II

Date of Feedback: 13/05/2023

Course Name: Ethical hacking

1. How do you value the course content?

It is very useful for the future.

2. How would you understand the content delivery by the instructor?

the instructor has delivered the content very clearly and explainable.

3. Write the overall quality of the program

the quality of the program is very good.

4.Will you recommend this program to your friends/juniors/seniors?

I will recommend this my friends and juniors

Suggestions to improve,if any:

It's all good

Aravind.V/13/05

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM-

ACADEMIC YEAR 2022-2023

Name of the Student: A. Indhuja

Register No: 411521106020

Year: II

Date of Feedback: 13/05/2023

Course Name: Ethical hacking

1. How do you value the course content?

   It is very usefull since it is edge-cutting technology.

2. How would you understand the content delivery by the instructor?

   It is easy to understand.

3. Write the overall quality of the program

   The quality of overall the program is good.

4. Will you recommend this program to your friends/juniors/seniors?

   Yes

Suggestions to improve,if any: Nil

A Indhuja

Signature of the Student

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM-

ACADEMIC YEAR 2022-2023

Name of the Student: M. Kanagavel

Register No: 411521106025

Year: ~~I~~ II

Date of Feedback: 13/05/2023

Course Name: Ethical hacking

1. How do you value the course content?

The course content very helpful to future

2. How would you understand the content delivery by the instructor?

The Instructor has delivery the deliver easy to understand way.

3. Write the overall quality of the program

The overall quality of the Program is very good

4. Will you recommend this program to your friends/juniors/seniors?

Yes, I will recommend this program to my friends Because its very useful

Suggestions to improve,if any:

This way of teaching is very good

M. Kanagavel 13/05/2023

Signature of the Student

Avinash.S
Second year ECE

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASSESSMENT 1 ON ETHICAL HACKING

40/50

1. What is the primary goal of ethical hacking?

a) To cause damage and disrupt systems

b) To gain unauthorized access to systems

c) To identify and fix security vulnerabilities

d) To steal sensitive information

15/05/23

2. Which of the following is an example of passive reconnaissance in ethical hacking?

a) SQL injection

b) Port scanning

c) Social engineering

d) Network sniffing

3. Which type of testing involves assessing a system without any prior knowledge or information?

a) Black-box testing

b) White-box testing

c) Gray-box testing

d) Blue-box testing

4. What is the main difference between vulnerability assessment and penetration testing?

a) The tools used

b) The level of expertise required

c) The scope of testing

d) The time taken to complete the assessment

5. Which of the following is NOT a phase of the ethical hacking process?

a) Footprinting and reconnaissance

b) Scanning

c) Exploitation

d) Destroying data

6. A security researcher discovers a critical vulnerability in a popular web application. What is the best course of action?

a) Exploit the vulnerability to raise awareness

b) Disclose the vulnerability responsibly to the vendor

c) Sell the vulnerability on the dark web for profit

d) Keep the vulnerability a secret to maintain an advantage

7. Which of the following password-cracking techniques tries all possible character combinations to guess a password?

a) Brute-force attack

b) Dictionary attack

c) Rainbow table attack

d) Phishing attack

8. What is the purpose of a honeypot in ethical hacking?

a) To attract and detect malicious activities

b) To hide sensitive information from attackers

c) To monitor legitimate user activities

d) To encrypt data and communication

9. Which of the following is an example of a social engineering attack?

a) Cross-site scripting (XSS)

b) Distributed Denial of Service (DDoS)

c) SQL injection

d) Tailgating into a secure building

10. Which protocol is commonly used for secure remote login and file transfer?

a) HTTP

b) FTP

c) SSH

d) DNS

11. A security professional wants to test the security of a web application by simulating a malicious attack. What type of testing is this?

a) Vulnerability assessment

b) Penetration testing

c) Firewall testing

d) Compliance testing

12. What is the main purpose of using a proxy server in ethical hacking?

a) To bypass firewalls and access restricted content

b) To hide the identity of the attacker

c) To encrypt communication between the attacker and the target

d) To conduct denial-of-service attacks

13. A security analyst is performing a network scan and finds an open port 22. What service is likely running on that port?

a) HTTP

b) FTP

c) SSH

d) SMTP

14. Which phase of the ethical hacking process involves gathering information about the target system?

a) Enumeration

b) Scanning

c) Footprinting and reconnaissance

d) Exploitation

15. What is the main objective of a Distributed Denial of Service (DDoS) attack?

a) Gain unauthorized access to a system

b) Steal sensitive data from a server

c) Make a service or website unavailable to legitimate users

d) Manipulate data packets during transmission

16. Which of the following statements best defines "phishing" in the context of ethical hacking?

a) Gaining unauthorized access to a system using password-cracking techniques

b) Simulating an attack on a network to test its security measures

c) Social engineering technique to deceive users into revealing sensitive information

d) Utilizing software vulnerabilities to gain control of a remote system

17. What is the primary purpose of using encryption in communication channels?

a) To make data transmission faster

b) To hide data from network administrators

c) To secure data from unauthorized access during transmission

d) To prevent data loss in case of hardware failure

18. A security researcher finds a software vulnerability but chooses not to disclose it to the vendor or the public. What term best describes this action?

a) Responsible Disclosure

b) Full disclosure

c) White-hat hacking

d) Zero-day exploit

19. Which of the following is an example of a physical security control?

a) Antivirus software

b) Network firewall

c) Biometric access control

d) Intrusion Detection System (IDS)

20. What is the primary purpose of penetration testing?

a) To exploit vulnerabilities and gain unauthorized access

b) To assess the resilience of a system against various attacks

c) To conduct reconnaissance and gather information about the target

d) To simulate Distributed Denial of Service (DDoS) attacks

21. Which of the following statements best describes "gray-box testing" in ethical hacking?

a) The tester has full knowledge of the target system's internal workings

b) The tester has no knowledge of the target system before starting the test

c) The tester has limited knowledge of the target system, similar to a user

d) The tester is not authorized to perform any testing on the target system

22. What is the main goal of a SQL injection attack?

a) To exploit a web server's configuration vulnerabilities

b) To overload a server and crash it

c) To steal sensitive data from a database

d) To gain unauthorized access to a network

23. Which type of ethical hacker has permission to perform penetration testing on systems they do not own?

a) Black-hat hacker

b) Gray-hat hacker

c) White-hat hacker

d) Script kiddie

24. Which of the following is an example of a passive vulnerability scanner?

a) Nmap

b) Wireshark

c) Metasploit

d) Nessus

25. In ethical hacking, what is the term used for a technique that involves redirecting network traffic to a malicious server?

a) DNS poisoning

b) ARP spoofing

c) IP hijacking

d) Packet sniffing

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Organizes

ADD ON COURSE IN

"ETHICAL HACKING"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. AVINASH . S

of Second Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ETHICAL HACKING** held at held from 04.03.2023 to 13.05.2023

PRINCIPAL

COURSE COORDINATOR

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INSTITUTE OF TECHNOLOGY

PERI EDUCATION

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ETHICAL HACKING"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / ~~Ms.~~ SUJITHA.S

of Second Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ETHICAL HACKING** held at held from 04.03.2023 to 13.05.2023

PRINCIPAL

COURSE COORDINATOR

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PERI EDUCATION

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ETHICAL HACKING"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. SUDHAM. M

of Second Year, Electronics and Communication Engineering, PERI Institute of Technology has completed an add on course in **ETHICAL HACKING** held at held from 04.03.2023 to 13.05.2023

PRINCIPAL

COURSE COORDINATOR

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT/EEE/CC/2022-23/007 **Date: 17.04.2023**

CIRCULAR

The Electrical and Electronics Engineering Department of PERI IT has planned to conduct Add-on course titled "Embedded C" for II, III and IV year EEE students.

S.No.	Year	Scheduled Date	Session 1	Session 2
1	II/III/IV	26-04-2023 to 02-05-2023	8.30 AM to 11.45AM	12.30 PM to 03.30 PM

Coordinator **HoD/EEE**

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members
5. Notice Board

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of Meeting

Course Code : EA011

Course Name: Embedded C

Venue: HOD Room, Beta Block , PERI IT

Date:19/04/2023 Time:12.00 PM - 1.00 PM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Ms. S. L. Sreedevi, HOD/EEE,
2. Mr. R. Tamilamuthan, Co Ordinator,
3. Mr. A. Antony Charles,
4. Dr. J. Raji,

Mr. R. Tamilamuthan, Co Ordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1: Syllabus preparation

The syllabus is framed accordingly in order to meet the objectives of the course, various Universities, IITs, NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Two assessment will be conducted at the end of the course.

Coordinator **Senior Faculty Member** **HOD/EEE** **PRINCIPAL**

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

SYLLABUS

MODULE 1: INTRODUCTION TO EMBEDDED SYSTEMS

Definition and characteristics of embedded systems, Overview of embedded system architecture, Importance of programming languages in embedded systems development, Basics of C Programming

MODULE 2: INTRODUCTION TO C PROGRAMMING LANGUAGE

Variables, data types, and operators, Control structures: if, else, switch, loops, Arrays and strings, Functions and modular programming,

MODULE 3: EMBEDDED C PROGRAMMING

Differences between standard C and embedded C, Accessing hardware peripherals, Bit manipulation and bitwise operators, Interrupt handling and event-driven programming,

MODULE 4: MEMORY MANAGEMENT

Memory types in embedded systems (ROM, RAM, flash memory), Pointers and dynamic memory allocation, Memory-mapped I/O

MODULE 5: DEBUGGING AND TESTING

Tools for debugging embedded C code, Testing methodologies for embedded systems, Real-time debugging techniques

Coordinator

HOD/EEE

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Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

SHORT DESCRIPTION

Course Code: EA011

Course Name: Embedded C

Embedded C is a programming language that is used in the development of Embedded Systems. Embedded Systems are specialized systems designed to perform very specific functions or tasks. Embedded System is the combination of hardware and software and the software is generally known as firmware which is embedded into the system hardware. Embedded C is used to program a wide range of microcontrollers and microprocessors. Embedded C requires less number of resources to execute in comparison with high-level languages such as assembly programming language.

COURSE OBJECTIVES

- To identify Embedded C software components and know how they are different from standard C software components
- To recognize and use important concepts such as HAL (Hardware Abstraction Layer) to write Embedded C code that is portable to different embedded controllers
- To utilize hardware/software signaling mechanism to implement effective communication between embedded software stack and hardware
- To comprehend hardware communication protocols for implementation with other peripheral hardware devices such as GPIO, ADC, and Serial I/O
- To understand embedded controller hardware and software stack and their respective differences from traditional software development

Coordinator

HOD/EEE

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

TIME TABLE

Course Code: EA011

Course Name: Embedded C

S.No	DATE	HOURS	TOPIC
1	26.04.2023	1st-8th	Overview of design thinking principles, Introduction to the double diamond design process, Understanding the role of empathy in electrical design, Fundamentals of electrical engineering concepts
2	27.04.2023	1st-8th	Techniques for empathizing with end-users in electrical design contexts, Methods for defining design challenges and problem statements, Case studies and exercises focusing on user-centered design in electrical engineering
3	28.04.2023	1st-8th	Creative brainstorming techniques for generating electrical design concepts, Rapid prototyping methods for exploring and testing ideas, Tools and resources for creating prototypes in electrical engineering
4	29.04.2023	1st-8th	Strategies for gathering feedback from users and stakeholders, Techniques for evaluating and iterating on electrical design prototypes, Importance of iteration and refinement in the design process, Case studies and real-world examples of successful iteration in electrical design projects
5	02.05.2022	1st-8th	Integration of user feedback and design improvements into final electrical design solutions, Principles of system integration and optimization in electrical engineering, Ethical considerations and sustainability in electrical design

Coordinator

HOD/EEE

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

II - EEE

S. No	Register Number	Student Name
1.	411521105001	Ashish J
2.	411521105002	Bubesh S
3.	411521105004	Divya R
4.	411521105006	Kamalavendhan S
5.	411521105007	Kaviya M
6.	411521105008	Keerthika V
7.	411521105009	Likhitha J
8.	411521105011	Murali S
9.	411521105012	Nikitha N
10.	411521105013	Nisha B
11.	411521105015	Pothigachalam U
12.	411521105017	Priyanka M
13.	411521105018	Sabitha S
14.	411521105019	Samy K
15.	411521105020	Saravanan K
16.	411521105021	Shasidharan K
17.	411521105022	Sivaraj R
18.	411521105023	Thivya S
19.	411521105024	Varunraj G
20.	411521105025	Vinayaga Moorthy M
21.	411521105301	Balaji E
22.	411521105302	Gokul R
23.	411521105303	Illayabharathi E
24.	411521105304	JaiSankar D
25.	411521105305	Kamaraj K
26.	411521105306	Karthik Priya kumar D
27.	411521105307	Nagarjun S
28.	411521105308	Naveen N
29.	411521105309	Rohit A
30.	411521105310	Rupesh P
31.	411521105311	Sandhanakrishnan B
32.	411521105312	Sethuraman A

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

III - EEE

S. No	Register Number	Student Name
1.	411520105001	Arunachalam R L
2.	411520105003	Chandru S
3.	411520105004	Janarthanan K
4.	411520105005	Jayanth D
5.	411520105006	Keerthana V
6.	411520105007	Krishnakumar R
7.	411520105008	Nitheesh A
8.	411520105009	Pavithra C
9.	411520105010	Poovarasan A
10.	411520105011	Praveenkumar A
11.	411520105012	Rajkumar R
12.	411520105013	Ramya S
13.	411520105014	Saravanan E
14.	411520105015	Sivaramakrishnan R
15.	411520105016	Srikanth G
16.	411520105017	Vigneshwaran G
17.	411520105018	Yuvashree M
18.	411520105301	Abishek Samuel B
19.	411520105302	Anuramabarathi S
20.	411520105304	Dinesh Kumar P
21.	411520105307	Gokul S
22.	411520105308	Hariharan S
23.	411520105309	Harish P
24.	411520105310	Harish R
25.	411520105311	Jancy Reena P
26.	411520105312	Jayanthan S
27.	411520105313	Kavikumar M
28.	411520105314	Kingslin A
29.	411520105315	Mariyakalai P
30.	411520105316	Mohan R
31.	411520105319	Nivetha S
32.	411520105320	Poovarasan M
33.	411520105321	Prasanth K
34.	411520105323	Rajesh S
35.	411520105324	Sarvesh S
36.	411520105326	Sowndarya S
37.	411520105327	Sridharan P
38.	411520105328	Srinath K
39.	411520105329	Sumithra S
40.	411520105330	Suresh M

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

IV – EEE

S. No	Register Number	Student Name
1.	411519105001	Abimanyu S
2.	411519105002	Archanajenifer C
3.	411519105003	Balaji S
4.	411519105005	Durairaj M
5.	411519105006	Hariharan R
6.	411519105007	Iyappan P
7.	411519105008	Ponnarasi K
8.	411519105009	Savitha R
9.	411519105010	Surya P
10.	411519105011	Vinothkumar M
11.	411519105301	Dinesh Kumar V
12.	411519105303	Prakash V

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance

Course Code: EA011

Course Name: Embedded C

S. No	Register Number	Name of the Student	Date				
			26.04.2022	27.04.2022	28.04.2022	29.04.2022	02.05.2022
II - EEE							
1.	411521105001	Ashish J	Ashish J	Ashish J	Ashish J	Ashish J	Ashish J
2.	411521105002	Bubesh S	Bubesh	Bubesh	Bubesh	Bubesh	Bubesh
3.	411521105004	Divya R	Divya R	Divya R	Divya R	Divya R	Divya R
4.	411521105006	Kamalavendhan S					
5.	411521105007	Kaviya M					
6.	411521105008	Keerthika V					
7.	411521105009	Likhitha J					
8.	411521105011	Murali S					
9.	411521105012	Nikitha N					
10.	411521105013	Nisha B	Nisha	Nisha	Nisha	Nisha	Nisha
11.	411521105015	Pothigachalam U					
12.	411521105017	Priyanka M	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka
13.	411521105018	Sabitha S	Sabitha	Sabitha	Sabitha	Sabitha	Sabitha
14.	411521105019	Samy K	Samy K	Samy K	Samy K	Samy K	Samy K
15.	411521105020	Saravanan K	Saravanan K	Saravanan K	Saravanan K	Saravanan K	Saravanan K
16.	411521105021	Shasidharan K					

17.	411521105022	Sivaraj R					
18.	411521105023	Thivya S					
19.	411521105024	Varunraj G					
20.	411521105025	Vinayaga Moorthy M					
21.	411521105301	Balaji E					
22.	411521105302	Gokul R					
23.	411521105303	Illayabharathi E					
24.	411521105304	JaiSankar D					
25.	411521105305	Kamaraj K					
26.	411521105306	Karthik Priya kumar D					
27.	411521105307	Nagarjun S					
28.	411521105308	Naveen N					
29.	411521105309	Rohit A					
30.	411521105310	Rupesh P					
31.	411521105311	Sandhanakrishnan B					
32.	411521105312	Sethuraman A					
III - EEE							
1.	411520105001	Arunachalam R L					
2.	411520105003	Chandru S					
3.	411520105004	Janarthanan K					
4.	411520105005	Jayanth D					
5.	411520105006	Keerthana V					
6.	411520105007	Krishnakumar R					
7.	411520105008	Nitheesh A					
8.	411520105009	Pavithra C					
9.	411520105010	Poovarasan A					
10.	411520105011	Praveenkumar A					
11.	411520105012	Rajkumar R					
12.	411520105013	Ramya S					
13.	411520105014	Saravanan E					
14.	411520105015	Sivaramakrishnan R					
15.	411520105016	Srikanth G					
16.	411520105017	Vigneshwaran G					

17.	411520105018	Yuvashree M					
18.	411520105301	Abishek Samuel B					
19.	411520105302	Anuramabarathi S					
20.	411520105304	Dinesh Kumar P					
21.	411520105307	Gokul S					
22.	411520105308	Hariharan S					
23.	411520105309	Harish P					
24.	411520105310	Harish R					
25.	411520105311	Jancy Reena P					
26.	411520105312	Jayanthan S					
27.	411520105313	Kavikumar M					
28.	411520105314	Kingslin A					
29.	411520105315	Mariyakalai P					
30.	411520105316	Mohan R					
31.	411520105319	Nivetha S					
32.	411520105320	Poovarasan M					
33.	411520105321	Prasanth K					
34.	411520105323	Rajesh S					
35.	411520105324	Sarvesh S					
36.	411520105326	Sowndarya S					
37.	411520105327	Sridharan P					
38.	411520105328	Srinath K					
39.	411520105329	Sumithra S					
40.	411520105330	Suresh M					
41.	411520105331	Thirsha M					
42.	411520105332	Thomas Richard M					
43.	411520105333	Varshini R					
44.	411520105334	Velu P					
45.	411520105335	Venkatesh M					
IV - EEE							
1.	411519105001	Abimanyu S					
2.	411519105002	Archanajenifer C					
3.	411519105003	Balaji S					

4.	411519105005	Durairaj M					
5.	411519105006	Hariharan R					
6.	411519105007	Iyappan P					
7.	411519105008	Ponnarasi K					
8.	411519105009	Savitha R					
9.	411519105010	Surya P					
10.	411519105011	Vinothkumar M					
11.	411519105301	Dinesh Kumar V					
12.	411519105303	Prakash V					

Coordinator

HOD/EEE

THIYYA.S

II - GEE

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment

Course Code : EA011
Course Name: Embedded C

24 | 25

1. Embedded system is designed to
   a) Execute single program repeatedly
   b) Execute many programs
   c) Both of the above
   d) None of the above

2. Embedded system is
   a) Reactive
   b) Real Time
   c) Proactive
   d) Reactive & Real Time

Raji
2/5/23

3. Software written for embedded system is called
   a) Embedded Software
   b) System program
   c) Operating system
   d) Program

4. Embedded system has
   a) Response time constraints
   b) Strict deadlines
   c) Turnaround time
   d) Response time

5. Assembly code embedded within C programs is called
   a) Inline assembly code Data visualization
   b) External assembly code
   c) External assembly code
   d) Standard Assembly Code

6. Embedded C requires compilers to create files to be downloaded to the
   a) Microcontrollers bar
   b) Microprocessors
   c) Operating system
   d) Microcontrollers & microprocessors

7. Embedded C is used for?
   a) Microcontrollers
   b) Desktop computers
   c) Laptops
   d) Audio system

8. Which software resides only in read only memory and is used to control products and systems for the consumer and industrial markets.
   a) Business
   b) System
   c) Embedded
   d) Personal

9. It is a characteristic provision of some debuggers to stop the execution after each instruction because title() method
   a) It facilitates to analyze or vary the contents of memory and register
   b) It facilitates to move the break point to a later point
   c) It facilitates to rerun the program
   d) It facilitates to load the object code program to system memory

10. Which component is replaced by an in-circuit emulator on the development board fortesting purposes?
   a) RAM
   b) I/O Ports
   c) Micro-controller IC
   d) ROM

11. It is feasible for an in-circuit emulator to terminate at the middle of the program execution so as to examine the contents of _____
   a) Memory
   b) Registers
   c) Memory & Registers
   d) Cache

12. Which operations are not feasible to perform by simulator programs in accordance to realtime programming?
   a) Memory Operations
   b) I/ O Operations
   c) Register Operations
   d) Debugging Operations

13. Which software is used to control products and systems for the consumer and industrial markets?
   a) System software
   b) Artificial intelligence software
   c) Embedded software
   d) Engineering and scientific software

14. Which system software is used to convert a "C" language program in tolanguage of another processor?
   a) Compiler
   b) Linker
   c) Cross Linker
   d) Cross Compiler

15. Which memory storage is widely used in PCs and Embedded Systems?
   a) EEPROM
   b) Flash memory
   c) DRAM
   d) SRAM

16. How is the protection and security for an embedded system made?
   a) Security chips
   b) Memory disk security
   c) IPR
   d) OTP

17. Which type of memory is suitable for low volume production of embedded systems?
   a) Non-volatile
   b) RAM
   c) Volatile
   d) ROM

18. Which level simulates the algorithms that are used within the embedded systems?
    a) Algorithmic level
    b) Switch level
    c) Gate level
    d) Circuit level

19. How an embedded system communicate with the outside world?
    a) Memory
    b) Peripherals
    c) Output
    d) Input

20. What does MESI stand for?
    a) Modified exclusive system input
    b) Modifies embedded shared invalid
    c) Modified exclusive shared invalid
    d) Modified exclusive stale invalid

21. What does ICE stand for?
    a) In-circuit EPOM
    b) In-code emulation
    c) In-circuit emulation
    d) In-code EPROM

22. Which is the single device capable of providing prototyping support for a range of microcontroller?
    a) Umbrella device
    b) OTP
    c) RAM
    d) ROM

23. What does PCM stand for?
    a) Peculiar Code Modulation
    b) Pulse Codec Machine
    c) Pulse Code Modulation
    d) Peripheral Code Machine

24. Which of the following is a part of RTOS kernel?
    a) Register
    b) ISR
    c) memory
    d) Input

25. What limits the amount of virtual memory in Windows 3.1?
    a) Static file
    b) Dynamic file
    c) Nature of swap file
    d) Size of the swap file

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

Name of the Student: THIVYA - S

Register No.: 411521105023

Year: II - EEE

Date of Feedback: 2.5.2023

Course Name: EMBEDDED C

1. How do you value the course content?

This course has met more than my expectations

2. How would you understand the content delivery by the instructor?

expectations for student learning were clearly defined

3. Write the overall quality of the program

The overall quality was awesome

4. Will you recommend this program to your friends/juniors/seniors?

For sure I will recommend

Suggestions to improve, if any:

Thivya.S

Signature of the Student

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

Name of the Student: ANURAMABARATHI S Register No.: 411520105302

Year: III Date of Feedback: 02/05/2023

Course Name: EMBEDDED C

1. How do you value the course content?

The course content was very easy.

2. How would you understand the content delivery by the instructor?

The instructor was very friendly & helping.

3. Write the overall quality of the program

Excellent

4.Will you recommend this program to your friends/juniors/seniors?

Yes, I will do.

Suggestions to improve, if any:

Nil

Signature of the Student

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

Name of the Student: ABIMANYU.S

Register No.: 411519105001

Year: IV - EEE

Date of Feedback: 02/05/2023

Course Name: EMBEDDED C.

1. How do you value the course content?

THE CONTENT WAS EASY AND UNDERSTANDABLE

2. How would you understand the content delivery by the instructor?

THE INSTRUCTOR. COMMUNICATION WAS VERY GOOD

3. Write the overall quality of the program

NICE

4.Will you recommend this program to your friends/juniors/seniors?

YES, I WILL RECOMMEND

Suggestions to improve, if any: Nil

Signature of the Student

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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ADD ON COURSE IN

"EMBEDDED C"

CERTIFICATE
OF PARTICIPATION

This is to certify that ~~Mr~~ / Ms. Thivya S

of II Year, Electrical and Electronics Engineering, PERI Institute of Technology has completed an add on course in **EMBEDDED C** held from **26/04/2023** to **02/05/2023.**

PRINCIPAL | VICE PRINCIPAL | HOD | COORDINATOR

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Organizes

ADD ON COURSE IN

"EMBEDDED C"

CERTIFICATE
OF PARTICIPATION

This is to certify that ~~Mr~~ / Ms. Anuramabarathi S

of II Year, Electrical and Electronics Engineering, PERI Institute of Technology has completed an add on course in **EMBEDDED C** held from **26/04/2023** to **02/05/2023.**

PRINCIPAL | VICE PRINCIPAL | HOD | COORDINATOR

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PERI Knowledge Park, Mannivakkam, Chennai - 600048

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Organizes

ADD ON COURSE IN

"EMBEDDED C"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / ~~Ms.~~ Abimanyu S

of IV Year, Electrical and Electronics Engineering, PERI Institute of Technology has completed an add on course in **EMBEDDED C** held from **26/04/2023** to **02/05/2023.**

PRINCIPAL | VICE PRINCIPAL | HOD | COORDINATOR

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PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /MECH /Add-On Course/2022-2023/01 **Date: 10.01.2023**

CIRCULAR

The Mechanical Engineering Department of PERI IT has planned to conduct Add-on course titled "**MODELING FOR DESIGN ENGINEERS**" for the Academic year of 2022 – 2023 for IV year Mech students.

Sl. No	Year	Scheduled Date	Session 1	Session 2
1	IV	25.02.2023-08.04.2023	8.30 AM to 11.45AM	12.30PM to 2.00PM

Co-ordinator

Head of the Department

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members
5. Notice Board

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting

Course Name: MEA007 - MODELING FOR DESIGN ENGINEERS

Venue: HOD Room, Beta Block, PERI IT

Date: 13 /01/2023 Time:12.00PM-1.00PM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Mr. Anil Kumar, HOD/Mechanical
2. Dr. R. M. Sathyamoorthy, Assistant Professor / Mechanical
3. Mr. Vignesh, Assistant Professor / Mechanical
4. Mr. Dhilip Kumar, Assistant Professor / Mechanical

Dr. R. M. Sathyamoorthy, Coordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1: Syllabus preparation for MODELING FOR DESIGN ENGINEERS

The syllabus is framed accordingly in order to meet the objectives of the course, various Universities, IITs, NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessment exam will be conducted at the end of the course.

Coordinator **Senior faculty member** **HOD/MECH** **PRINCIPAL**

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

SHORT DESCRIPTION

Course Code: MEA007

Course Name: MODELING FOR DESIGN ENGINEERS

Solid Modeling is the computer modeling of solid objects. The objective of Solid Modeling is to ensure that every surface is geometrically correct. It is considered the most complex aspect to master in computer-aided design because it requires the CAD software to simulate the object from within and outside. This is critical as it lets designers provide cutaways of the design, such as an engine and its components. Modeling allows the design, creation, visualization and animation of digital 3D models.

.COURSE OBJECTIVES

The objectives of the students are well-prepared to use advanced modeling techniques in engineering design, equipping them with the skills and knowledge necessary for successful careers as design engineers.

- Handling 2D drafting and 3D modeling of product.
- Applying CAD in real life applications.
- Design, Optimization, Manufacturing and Product Development to bring new technologies.

Coordinator

HOD/MECH

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

Course Code and Name: MEA007- MODELING FOR DESIGN ENGINEERS

SYLLABUS

S. No	Module type	Topics	Hours
1	Software training	Solid work documentation tip, Default template unit selection, Navigating the solid works interface, Customizing the command manager, The Menu Bar toolbar and menu	8
2	Software training	Changing interface colors Customizing strategies Toolbars, Menus, Background colors or images Saving custom interface setting Working with multiple document windows Copying the existing setting	8
3	Software training	Working with sketches Simple sketch,3Dsketch,Dimensioning,Dimension Properties, Dimension (Angles),Structure of splines, Offset, Mirror, Point sketch, Trim Interface, Polygon creation, Ellipse, Partial ellipse, Parabola, Linear pattern, Circular Pattern, Modifying sketch, Slot sketch entities	7
4	Software training	Dimension relation toolbar Smart dimension, Horizontal Dimensions, Chamfer dimension	7

Coordinator

HOD/MECH

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

TIME TABLE

Course Code: MEA007 **Year/Semester:IV/VIII**

Course Name: Modeling for Design Engineers **Session: FN & AN**

Sl. No	DATE	HOURS	TOPICS
1	25.02.2023	2	Solid work documentation tip. Default template unit selection, Navigating the solid works interface, Customizing the command
2	25.02.2023	2	Changing interface colors Customizing strategies Toolbars, Menus, Background colors or images, Saving custom interface setting, Working with multiple document windows, Copying the existing settings
3	04.03.2023	3	Working with sketches Simple sketch, 3Dsketch, Dimensioning, Dimension, Properties, Dimension (Angles), Structure of splines, Offset, Mirror, Point sketch, Trim, Interface, Polygon creation, Ellipse, Partial ellipse. Parabola, Linear pattern, Circular Pattern, Modifying
4	04.03.2023	2	Dimension relation toolbar Smart dimension. Horizontal Dimensions. Chamfer dimension
5	18.03.2023	2	Working with Reference Geometries Creating Planes, Working with axis. Using Coordinate system, Using point as reference. Geometry.
6	18.03.2023	3	Creating simple parts Bottle example. Extrude feature option, Cut extrude. Thin feature panel, Using instant 3D, Making first extrude feature, Cutting a slot, Hole using 2D versus 3D sketches, Fillets and champers
7	25.03.2023	3	Using visualization Techniques Manipulating the view, Using arrow keys. Using mouse gestures, Using the view toolbar, Wireframe. Hidden lines visible. Shaded with edges, 3D Drawing view, Zebra strips, Annotation views, Applying appearance , Using Display Status
8	25.03.2023	3	Functions Copying and moving sketch, entities, Move entities, Rotate entities, Copy entities, Scale entities. Modify sketch. Derived sketch.
9	25.03.2023	3	Working with revolving features Getting more from your sketch. Copying and moving sketch entities, Using colors and line styles with
10	08.04.2023	3	Selecting features Working with revolving features, Controlling sweep features, Cut sweep with a solid profile
10	08.04.2023	2	Creating curve features Working with helix features, Creating projected curves, Putting together a composite curve
12	08.04.2023	2	Understanding fillet types Creating a constant radius fillet, Creating variable radius fillet

Coordinator

HOD/MECH

Head of the Department
Dept. of Mechanical Engg.
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PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Course Name: Modeling for Design Engineers

Course Code: MEA007 **Year/Semester: IV/VIII**

S No	Reg. No	Name
1	411519114001	G. AJITH KUMAR
2	411519114002	A. AKASH
3	411519114003	C ARUN
4	411519114004	M. FAREED
5	411519114005	K. GANESH KUMAR
6	411519114006	R HARI KRISHNAN
7	411519114007	V MITHRAN
8	411519114008	M. MOHAMMED RAZOOL
9	411519114009	S. MUGUNTHARAJ
10	411519114010	M.T. NAVEEN
11	411519114011	S NEELAGANDAN
12	411519114012	T PRADEEP RAJ
13	411519114013	A. RAJ
14	411519114015	G SABARI VASAN
15	411519114016	A SANDEESH KUMAR

S No	Reg No	Name
16	411519114018	V. SATHISH
17	411519114019	K. SATHISH KUMAR
18	411519114020	S SELVINRAJ
19	411519114021	V. SIVAKUMAR
20	411519114022	B SURYA NARAYANAN
21	411519114023	M THAHA MOHAMED
22	411519114301	S ABDUL RAJACQ
23	411519114302	AJAY MATHEW
24	411519114303	MATHAN
25	411519114305	S NAGACHARAN
26	411519114306	P. SARAVANAKUMAR.
27	411519114307	N. SUNIL.
28	411519114308	TAMILARASAN
29	411519114309	VALLARASU
30	411519114310	SHYAM KUMAR

Coordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
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PERI INSTITUTE OF TECHNOLOGY
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HOD/MECH

Head of the Department
Dept. of Mechanical Engg.
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PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai 600048
DEPARTMENT OF MECHANICAL ENGINEERING
ACADEMIC YEAR 2022-2023
Attendance Sheet
Course Name: Modeling for Design Engineers

Course Code: MEA007 **Year/Semester: II/IV**

Sl. No	Registration Number	Student Name	25.02.23	04.03.23	18.03.23	25.03.23	08.04.23
1	411519114001	G. AJITH KUMAR					
2	411519114002	A. AKASH					
3	411519114003	C ARUN					
4	411519114004	M. FAREED					
5	411519114005	K. GANESH KUMAR					
6	411519114006	R HARI KRISHNAN					
7	411519114007	V MITHRAN					
8	411519114008	M. MOHAMMED RAZOOL					
9	411519114009	S. MUGUNTHARAJ					
10	411519114010	M.T. NAVEEN					
11	411519114011	S NEELAGANDAN					
12	411519114012	T PRADEEP RAJ					
13	411519114013	A. RAJ					
14	411519114015	G SABARI VASAN					
15	411519114016	A SANDEESH KUMAR					

Sl. No	Registration Number	Student Name	25.02.23	04.03.23	18.03.23	25.03.23	08.04.23
16	411519114018	V. SATHISH	V.S	V.S	V.S	V.S	V.S
17	411519114019	K. SATHISH KUMAR	K. Sathish	K. Sathish	K. Sathish	K. Sathish	K. Sathish
18	411519114020	S SELVINRAJ	S.Sel	S.Sel	S.Sel	S.Sel	S.Sel
19	411519114021	V. SIVAKUMAR	V. Sivak	V. Sivak	V. Sivak	V. Sivak	V. Sivak
20	411519114022	B SURYA NARAYANAN	B. Sur	B. Sur	B. Sur	B. Sur	B. Sury
21	411519114023	M THAHA MOHAMED	M.Th	M.Th	M.Th	M.Th	M.Th
22	411519114301	S ABDUL RAJACQ	S ABDUL RAJACQ	S ABDUL RAJACQ	S ABDUL RAJACQ	S ABDUL RAJACQ	S ABDUL RAJACQ
23	411519114302	AJAY MATHEW	Ajay Mathew	Ajay Mathew	Ajay Mathew	Ajay Mathew	Ajay Mathew
24	411519114303	MATHAN	Mathan	Mathan	Mathan	Mathan	Mathan
25	411519114305	S NAGACHARAN	S. Nagacharan	S. Naga Charan	S. Naga Charan	S. Naga Charan	S. Naga Charan
26	411519114306	P. SARAVANAKUMAR.	P. Saravan	P. Saravan	P. Saravan	P. Sara	P. Sara
27	411519114307	N. SUNIL.	N. Sunil	N. Sunil	N. Sunil	N. Sunil	N. Sunil
28	411519114308	TAMILARASAN	Tamilarasan	Tamilarasan	Tamilarasan	Tamilar	Tamilarasan
29	411519114309	VALLARASU	Vallarasu	Vallarasu	Vallarasu	Vallarasu	Vallarasu
30	411519114310	SHYAM KUMAR	Shyam	Shyam	Shyam	Shyam	Shyam

Coordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

HOD/MECH

78/100

Satisfactory

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Tamilarasan
II yr / 4th sem
08/04/23

Assessment Test

MEA007 Modeling for Design Engineers

1. What is the primary purpose of a CAD (Computer-Aided Design) system?
   - A) To execute complex mathematical calculations
   - B) To create detailed 2D and 3D models
   - C) To manage project timelines
   - D) To store financial data

2. Which software is commonly used for 3D modeling in mechanical engineering?
   - A) Adobe Photoshop
   - B) AutoCAD
   - C) MATLAB
   - D) Microsoft Excel

3. What does FEA stand for in engineering analysis?
   - A) Finite Element Analysis
   - B) Fast Energy Application
   - C) Functional Engineering Algorithm
   - D) Finite Energy Approximation

4. Which of the following is NOT a type of CAD modeling?
   - A) Wireframe modeling
   - B) Solid modeling
   - C) Surface modeling
   - D) Binary modeling

5. In FEA, what is the purpose of meshing?
   - A) To define material properties
   - B) To divide the model into smaller, solvable parts
   - C) To apply boundary conditions
   - D) To create a visual representation

6. What is the primary advantage of parametric modeling?
   - A) It uses less memory
   - B) It allows easy modifications by changing parameters
   - C) It requires no prior design knowledge
   - D) It is always faster than other methods

7. Which term describes the process of creating a physical object from a digital model using additive processes?
   - A) CNC Machining
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   - C) Subtractive Manufacturing
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8. What is the primary purpose of using simulations in design engineering?
   - A) To reduce the cost of physical prototypes
   - B) To create artistic renderings
   - C) To compile engineering reports
   - D) To conduct market analysis

9. Which feature in CAD software helps in visualizing the internal structure of a 3D model?
   - A) Shading
   - B) Section view
   - C) Texture mapping
   - D) Exploded view

10. What is a key benefit of using cloud-based CAD tools?
    - A) Enhanced local storage
    - B) Improved collaboration and access from anywhere
    - C) Requirement of advanced hardware
    - D) Increased complexity in use

11. Which type of analysis would be used to determine the natural frequencies of a structure?
    - A) Static analysis
    - B) Modal analysis
    - C) Thermal analysis
    - D) Fatigue analysis

12. What is the role of constraints in parametric modeling?
    - A) To define the color of the model
    - B) To control the geometric relationships and dimensions
    - C) To store user data
    - D) To manage file permissions

13. In which phase of product design is reverse engineering most likely used?
    - A) Concept development
    - B) Detailed design
    - C) Prototyping
    - D) Post-production analysis

14. What does the term 'degrees of freedom' refer to in the context of kinematic analysis?
    - A) The temperature range of a material
    - B) The number of independent movements allowed
    - C) The budget flexibility for a project
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15. Which file format is widely used for sharing CAD models while preserving design intent and parametric information?
    - A) .jpg
    - B) .stl
    - C) .step
    - D) .pdf

16. What does the term 'boundary conditions' refer to in FEA?
    - A) The conditions at the edges of the simulation domain
    - B) The initial temperature of the material
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    - D) The software license limitations

17. Which of the following is a common application of CFD (Computational Fluid Dynamics)?
    - A) Stress analysis in beams
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    - C) Fluid flow analysis in pipelines
    - D) Electrical circuit design

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    - A) 3D rendering
    - B) Data management and workflow automation
    - C) Financial forecasting
    - D) Customer relationship management

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    - C) The process of determining the best color for a design
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PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

MEA007 Modeling for Design Engineers

name: A. Raj

Reg No: 411519114015

Year: II/IV

Date: 08.04.23

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PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

V. Sathish
411519114018
08.06.23

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PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Tamilarasan.D Register No: 411519114308

Year: II/4th Date of Feedback: 08/4/23

Course Name: MEA Modeling for Design Engineers

1. How do you value the course content?

The Coure content is good and useful

2. How would you understand the content delivery by the instructor?

Very clearly understand

3. Write the overall quality of the program

Excellent program

4. Will you recommend this program to your friends/juniors/seniors?

recommended

Suggestions to improve, if any:

Nice team work

Tamilarasan.

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: A. Raj

Register No: 421519114003

Year: II/IV

Date of Feedback: 07.04.23

Course Name: modeling for design Engineers

1. How do you value the course content?

the value of course content

2. How would you understand the content delivery by the instructor?

the understand the content delivery by the instructor is very good.

3. Write the overall quality of the program

the quality of the program is very useful

4. Will you recommend this program to your friends/juniors/seniors?

Juniors

Suggestions to improve, if any: not applicable.

Raj

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: V. SATHISH

Register No: 411519114018

Year: II

Date of Feedback: 09.04.23

Course Name: modeling for Design Engineers

1. How do you value the course content?

   It was good and very useball

2. How would you understand the content delivery by the instructor?

   It was helpfull and able to understand what where comming to tell

3. Write the overall quality of the program

   The overall program was good

4. Will you recommend this program to your friends/juniors/seniors?

   Juniors

Suggestions to improve, if any: Nill

V. S

Signature of the Student

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"MODELING FOR DESIGN ENGINEERS"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. SATHISH . V

of II Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **MODELING FOR DESIGN ENGINEERS** held from **25/02/2023** to **08/04/2023.**

PRINCIPAL | VICE PRINCIPAL | HOD | COORDINATOR

www.peri.education
PERI Knowledge Park, Mannivakkam, Chennai - 600048

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"MODELING FOR DESIGN ENGINEERS"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. RAJ. A

of II Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **MODELING FOR DESIGN ENGINEERS** held from **25/02/2023** to **08/04/2023.**

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Organizes

ADD ON COURSE IN

"MODELING FOR DESIGN ENGINEERS"

CERTIFICATE
OF PARTICIPATION

215

This is to certify that Mr / Ms. TAMILARASAN .D

of II Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **MODELING FOR DESIGN ENGINEERS** held from **25/02/2023** to **08/04/2023.**

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PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /MECH /Add-On Course/2022-2023/02 **Date: 10.01.2023**

CIRCULAR

The Mechanical Engineering Department of PERI IT has planned to conduct Add-on course titled "**SMALL UNMANNED AERIAL VEHICLE-DRONES**" for the Academic Year of 2022 – 2023 for III year Mech students.

Sl. No.	Year	Scheduled Date	Session 1	Session 2
1	III	25.02.2023 -01.04.2023	8.30 AM to 11.45AM	12.30PM to3.30PM

Co-ordinator 10/1/23

Head of the Department 10/1/23

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members
5. Notice Board

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting

Course Code and Name: MEA011 SMALL UNMANNED AERIAL VEHICLE-DRONES

Venue: HOD Room, Beta Block, PERI IT

Date: 12/01/2023 Time: 12.00-1.00PM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Mr. Anil Kumar, HOD/Mechanical
2. Dr. R. M. Sathyamoorthy, Assistant Professor / Mechanical
3. Mr. Sundarapandiyan M, Assistant Professor / Mechanical
4. Mr. Dhilip Kumar, Assistant Professor / Mechanical

Mr. Sundarapandiyan M, Coordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1: Syllabus preparation for SMALL UNMANNED AERIAL VEHICLE-DRONES

The syllabus is framed accordingly in order to meet the objectives of the course, various Universities, IITs, NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessment exam will be conducted at the end of the course.

Coordinator **Senior faculty member** **HOD/MECH** **PRINCIPAL**

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 60

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

SHORT DESCRIPTION

Course Code: MEA011

Course Name: SMALL UNMANNED AERIAL VEHICLE-DRONES

Unmanned aircraft systems (UAS) are playing increasingly prominent roles in defence programs and defence strategies around the world. Technology advancements have enabled the development of it to do many excellent jobs as reconnaissance, surveillance, battle fighters, and communications relays. Simulating a small unmanned aerial vehicle (SUAV) dynamics and analysing its behaviour at the pre-flight stage is too important and more efficient. The first step in the UAV design is the mathematical modelling of the nonlinear equations of motion. At the end the model is checked by matching between the behaviour of the states of the non-linear UAV and the resulted linear model with doublet at the control surfaces.

COURSE OBJECTIVES

To make the students to understand the basic concepts of Small UAV systems design.

- To introduce basic concepts of Small UAV
- To understand the basics of airframe
- To understand the avionics hardware
- To know communication payloads and controls and design considerations.
- To study path planning, Micro Aerial Vehicles and Small UAV certification standards

Coordinator

HOD/MECH

Head of the Department
Dept. of Mechanical Engg
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Mannivakkam, Ch-600 048.

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DEPARTMENT OF MECHANICAL ENGINEERING

MEA011- SMALL UNMANNED AERIAL VEHICLE-DRONES

SYLLABUS

Module I: INTRODUCTION TO SMALL UAV

History of Small UAV —classification — Introduction to Small Unmanned Aircraft Systems--models and prototypes — System Composition-applications

Module II: THE DESIGN OF SMALL UAV SYSTEMS

Introduction to Design and Selection of the System - Aerodynamics and Airframe Configurations- Characteristics of Aircraft Types- Design Standards and Regulatory Aspects-control surfaces-specifications.

Module III: AVIONICS HARDWARE

Autopilot AGL-pressure sensors-servos-accelerometer gyros-actuators- power supply-processor, integration, installation, configuration, and testing

Module IV: COMMUNICATION PAYLOADS AND CONTROLS

Payloads-Telemetry-tracking-Aerial photography-controls-PID feedback-radio control. Frequency range — modems-memory system-simulation-ground test-analysis-trouble shooting

Module V: THE DEVELOPMENT OF SMALL UAV SYSTEMS

Waypoints navigation-ground control software- System Ground Testing- System In-flight Testing- Future Prospects and Challenges-Case Studies — Mini and Micro UAVs.

Coordinator

HOD/MECH

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

TIME TABLE

Course Code: MEA011 **Year/Semester: III/VI**

Course Name: Small Unmanned Aerial Vehicle-Drones **Session: FN & AN**

Sl. No	DATE	HOURS	TOPIC
1	25.02.2023	1st-6th	History of Small UAV —classification — Introduction to Small Unmanned Aircraft Systems--models and prototypes — System Composition-applications
2	04.03.2023	1st-6th	Introduction to Design and Selection of the System-Aerodynamics and Airframe Configurations-Characteristics of Aircraft Types- Design Standards and Regulatory Aspects-control surfaces-specifications.
3	18.03.2023	1st-6th	Autopilot AGL-pressure sensors-servos-accelerometer gyros-actuators- power supply-processor, integration, installation, configuration, and testing
4	25.03.2023	1st-6th	Payloads-Telemetry-tracking-Aerial photography-controls-PID feedback-radio control Frequency range —modems-memory system-simulation-ground test-analysis-trouble shooting
5	01.04.2023	1st-6th	Waypoints navigation-ground control software- System Ground Testing- System In-flight Testing- Future Prospects and Challenges-Case Studies — Mini and Micro UAVs.

Coordinator

HOD/MECH

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH
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Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Course Name - SMALL UNMANNED AERIAL VEHICLE-DRONES

Course Code: MEA011

Year/Semester: III/VI

S NO	REG NO	NAME
1	411520114001	ABINESH N R
2	411520114002	DHARANI DHARAN P
3	411520114003	DHARANI VARAN T
4	411520114004	GOWTHAM K
5	411520114005	KARTHIK N
6	411520114006	MOHAMMED KANNI A
7	411520114007	NITHYANANDHAM S
8	411520114008	PUVIRASAN
9	411520114009	RAJESH G
10	411520114010	RITHWIK E B
11	411520114011	ROOBAN DHARMARAJ K
12	411520114012	SANTHOSH KUMAR R
13	411520114013	SARANRAJ S
14	411520114014	SATHISH M
15	411520114015	SRIDHARAN S
16	411520114016	SUGADEV V
17	411520114017	TAMIL SELVAN C
18	411520114018	TAMILSELVAN V
19	411520114301	AJITH S
20	411520114303	ARINARAYANAN P
21	411520114304	ARJUN K
22	411520114305	BALA ASHWIN D
23	411520114306	BALACHANDAR S
24	411520114307	BALAMURUGAN P
25	411520114308	DEEPAK R
26	411520114309	GEETHAPRIYAN M G
27	411520114310	GOKULRAJ R
28	411520114311	GOWTHAM P
29	411520114312	JOSHUA A
30	411520114313	JOSHUA DANIEL M
31	411520114314	KISHORE B
32	411520114316	MANIKANDAN S
33	411520114317	MUKESH R
34	411520114321	PRASANTH M
35	411520114322	PRATHIBAN T
36	411520114338	VETRIMURUGAN S
37	411520114341	ANAND JOTHI

Coordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048.

HOD/MECH

Head of the Department
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PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance Sheet

Course Name: Small Unmanned Aerial Vehicle-Drones

Course Code: MEA011 **Year/Semester: III/VI**

Sl. No	Registration Number	Student Name	25.02.23	04.03.23	18.03.23	25.03.23	01.04.23
1	411520114001	ABINESH N R	R. Abinesh	R. Abinesh	R. Abinesh	R. Abinesh	R. Abinesh
2	411520114002	DHARANI DHARAN P	Dharan	Dharan	Dharan	Dharan	Dharan
3	411520114003	DHARANI VARAN T	Dhru	Dhru	Dhru	Dhru	Dhru
4	411520114004	GOWTHAM K	Gowtham	Gowtham	Gowtham	Gowtham	Gowtham
5	411520114005	KARTHIK N	Karthik. N	Karthik. N	Karthik. N	Karthik. N	Karthik. N
6	411520114006	MOHAMMED KANNI A	Mohammed Kanni	Mohammed kanni	Mohammed kanni	Mohammed kanni	Mohammed kanni
7	411520114007	NITHYANANDHAM S	Nithya	Nithy	Nithy	Nithy	Nithy
8	411520114008	PUVIRASAN	puvirasan	puvirasan	Puvirasan	puvirasan	puvirasan
9	411520114009	RAJESH G	G. Rajesh	G. Rajesh	G. Rajesh	G. Rajesh	G. Rajesh
10	411520114010	RITHWIK E B	Rithwik.	Rithwik.	Rithwik.	Rithwik	Rithwik
11	411520114011	ROOBAN DHARMARAJ K	Rooban	Rooban	Rooban	Rooban	Rooban
12	411520114012	SANTHOSH KUMAR R	Santhosh	Santhosh	Santhosh	Santhosh	Santhosh
13	411520114013	SARANRAJ S	saranraj S	saranraj S	Saranraj S	saranraj S	saranraj S
14	411520114014	SATHISH M	sathish. M	sathish. M	Sathish M	sathish. M	Sathish. M
15	411520114015	SRIDHARAN S	Sridharan	Sridharan	Sridharan	Sridharan	Sridharan
16	411520114016	SUGADEV V	sugadev	sugadev	Sugadev	Sugadev	Sugadev
17	411520114017	TAMIL SELVAN C	Tamil	Tamil	Tamil	Tamil	Tamil
18	411520114018	TAMILSELVAN V	Tamil Selvan V	Tamil Selvan V	Tamil Selvan V	Tamil Selvan V	Tamil Selvan V
19	411520114301	AJITH S	S. Ajith	S. Ajith	S. Ajith	S. Ajith	S. Ajith
20	411520114303	ARINARAYANAN P	Arinarayanan	Arinarayanan	Arinarayanan	Arinarayanan	Arinarayanan

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21	411520114304	ARJUN K					
22	411520114305	BALA ASHWIN D					
23	411520114306	BALACHANDAR S					
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K. Gowtham
411520114004
1/4/23

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

MEA011 - Small Unmanned Aerial Vehicle-Drones

82/100

1/4/23

1. What does UAV stand for?

A) Unmanned Aerial Vehicle
B) Underwater Autonomous Vehicle
C) Unidentified Aerial Vehicle
D) Unmanned Automotive Vehicle

2. Which of the following is a common use for small UAVs?

A) Deep-sea exploration
B) Agricultural monitoring
C) Space travel
D) Road construction

3. What is the primary benefit of using drones in agriculture?

A) Increased fuel consumption
B) Enhanced pest control
C) Detailed aerial imaging and data collection
D) Reduced need for manual labor

4. What component is essential for a UAV to maintain stable flight?

A) Propeller
B) GPS
C) Gyroscope
D) Battery

5. In the context of drones, what is FPV?

A) First Person View
B) Flight Performance Verification
C) Fixed Position View
D) Full Power Vision

6. Which type of motor is commonly used in small UAVs?

A) Internal combustion engine
B) Stepper motor
C) Brushless DC motor
D) Hydraulic motor

7. What does GPS stand for, which is crucial for UAV navigation?

A) General Positioning System
B) Global Positioning System
C) Ground Positioning System
D) Geographic Positioning System

8. What is the typical power source for small UAVs?

A) Solar cells
B) Lithium-polymer (LiPo) batteries
C) Diesel fuel
D) Hydrogen fuel cells

9. Which regulatory body oversees UAV operations in the United States?

A) FAA (Federal Aviation Administration)
B) FCC (Federal Communications Commission)
C) DOT (Department of Transportation)
D) NTSB (National Transportation Safety Board)

10. What is a quadcopter?

A) A UAV with four rotors
B) A UAV with a camera
C) A UAV that can only fly in circles
D) A UAV with four cameras

11. Which sensor is commonly used for obstacle avoidance in drones?

A) Lidar
B) Barometer
C) Hygrometer
D) Odometer

12. Which term refers to the return of a drone to its starting point?

A) Auto-landing
B) Return to Home (RTH)
C) Homecoming
D) Autopilot

13. What does BVLOS stand for in drone operations?

A) Below Visible Light Operational Spectrum
B) Beyond Visual Line of Sight
C) Between Variable Light of Sun
D) Behind Visible Light on Screen

14. What is geofencing in the context of UAVs?

A) Establishing a virtual boundary for drone operation
B) Creating physical barriers to protect drones
C) Mapping geographical locations with drones
D) Tracking the movement of drones in real-time

15. Which of the following materials is commonly used to construct lightweight UAV frames?

A) Steel
B) Aluminum
C) Carbon fiber
D) Copper

16. What is the primary advantage of using a fixed-wing UAV over a multirotor UAV?

A) Easier to operate
B) Ability to hover
C) Longer flight duration
D) Better at vertical takeoff and landing

17. What is the function of an ESC (Electronic Speed Controller) in a drone?

A) Control the flight path
B) Manage the power to the motors
C) Provide GPS data
D) Control the camera gimbal

18. What is a common application of thermal cameras on UAVs?

A) Capturing high-resolution photos
B) Conducting search and rescue operations
C) Filming sports events
D) Mapping terrain

19. Which of the following is NOT a part of a UAV's ground control station?

A) Monitor
B) Controller
C) Propeller
D) Antenna

20. What is the typical maximum altitude for recreational drone flights in many countries?

A) 50 feet
B) 400 feet
C) 1000 feet
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21. Which feature allows a drone to follow a moving subject automatically?

A) GPS Hold
B) Follow Me Mode
C) Circle Mode
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22. What does VLOS stand for in drone terminology?

A) Very Low Operating Speed
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A) To increase flight speed
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D) To enhance GPS accuracy

24. Which flight mode allows a UAV to maintain a constant altitude without pilot input?

A) Manual Mode
B) Altitude Hold Mode
C) Sport Mode
D) GPS Mode

25. In UAV communication, what does the term "telemetry" refer to?

A) Visual data from the camera
B) Transmission of drone data to the ground control station
C) Audio communication between drones
D) Satellite imagery

C. Tamilselvan
411520114017
1/4/23

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

MEA011 - Small Unmanned Aerial Vehicle-Drones

88/100

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Joshua. A
AI1520114312
1/4/23

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

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76/100

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PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Goutham.K. Register No: 411520114004

Year: III/VI Date of Feedback: 1/4/23

Course Name: MEA011/Small Unmanned Aerial Vehicle - Drones

1. How do you value the course content?

Excellent content.

2. How would you understand the content delivery by the instructor?

Instructor was clear.

3. Write the overall quality of the program

Very Good.

4. Will you recommend this program to your friends/juniors/seniors?

yes.

Suggestions to improve, if any: —

Goutham.K.

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: C. Tamilselvan

Register No: 411520114017

Year: IV

Date of Feedback: 1/4/23

Course Name: ME A011 / Small Unmanned Aerial Vehicle Drones

1. How do you value the course content?

Good

2. How would you understand the content delivery by the instructor?

Good

3. Write the overall quality of the program

Good

4. Will you recommend this program to your friends/juniors/seniors?

Yes

Suggestions to improve, if any: —

C. Tamil

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: A. Joshua

Register No: 411520114312

Year: III

Date of Feedback: 1/4/23

Course Name: MEA011 / Small Unmanned Aerial Vehicle.

1. How do you value the course content?

   Good content.

2. How would you understand the content delivery by the instructor?

   Excellent.

3. Write the overall quality of the program

   Good.

4. Will you recommend this program to your friends/juniors/seniors?

   Sure

Suggestions to improve, if any: -

A. Joshua

Signature of the Student

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"SMALL UNMANNED AERIAL VEHICLE - DRONES"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. GOWTHAM.K

of III Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **SMALL UNMANNED AERIAL VEHICLE – DRONES** held from **25/02/2023** to **01/04/2023.**

PRINCIPAL	VICE PRINCIPAL	HOD	COORDINATOR

www.peri.education
PERI Knowledge Park, Mannivakkam, Chennai - 600048

PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"SMALL UNMANNED AERIAL VEHICLE - DRONES"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. TAMIL SELVAN.C

of IV Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **SMALL UNMANNED AERIAL VEHICLE – DRONES** held from **25/02/2023** to **01/04/2023.**

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Organizes

ADD ON COURSE IN

"SMALL UNMANNED AERIAL VEHICLE - DRONES"

CERTIFICATE
OF PARTICIPATION

241

This is to certify that Mr / Ms. JOSHUA. A

of III Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **SMALL UNMANNED AERIAL VEHICLE – DRONES** held from **25/02/2023** to **01/04/2023.**

PRINCIPAL	VICE PRINCIPAL	HOD	COORDINATOR

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Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERIIT /MECH /Add-On Course/2022-23/03 **Date: 16.02.2023**

CIRCULAR

The Mechanical Engineering Department of PERI IT has planned to conduct Add-on course titled **"MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES"** for the Academic year of 2022 – 2023 for II year Mechanical students.

Sl. No	Year	Scheduled Date	Session 1	Session 2
1	II	04.03.2023-13.05.2023	8.30 AM to 11.45AM	12.30PM to 2.00PM

16/2/23

Co-Ordinator

16/2/23

Head of the Department

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

Copy To:

1. Principal
2. Vice – Principal
3. IQAC
4. Faculty Members
5. Notice Board

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Minutes of the Meeting

Course Code and Name: MEA004 MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES

Venue: HOD Room, Beta Block, PERI IT

Date: 20/02/2023 Time: 12.00-1.00PM

Agenda of the meeting:

1. Syllabus preparation
2. Tentative Time Table
3. Assessment method

Members present:

1. Mr. Anil Kumar, HOD/Mech
2. Dr. R. M. Sathyamoorthy, Assistant Professor / Mech
3. Mr. Sundarapandiyan, Assistant Professor / Mech
4. Mr. Dhilip Kumar, Assistant Professor / Mech

Mr. DhilipKumar, Coordinator welcomed and briefed the committee members about the agenda.

Agenda Item 1: Syllabus preparation for MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES

The syllabus is framed accordingly in order to meet the objectives of the course, various Universities, IITs, NITs syllabus has been taken into consideration for syllabus preparation.

Agenda Item 2: Tentative Time Table

The timetable is prepared as per the university requirement and communicated to the subject expert.

Agenda Item 3: Assessment method

Assessment exam will be conducted at the end of the course.

20/2/23

Coordinator **Senior faculty member** **HOD/MECH** **PRINCIPAL**

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
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Dr. R. PALSON KENNEDY, M.E., PH.D
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DEPARTMENT OF MECHANICAL ENGINEERING

SHORT DESCRIPTION

Course Code: MEA004

Course Name: MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES

Automotive enhanced design and better reliability in automotive Assemblies Tools for software modelling and simulation can improve automotive systems as long as they continue to demonstrate benefits and become more common in the industry.

Students will excel in their professional career in automobile industry and research with the highest professional and ethical standards in their activities by acquiring knowledge in basic engineering, mathematics, science and automobile engineering. Students will exhibit professionalism, team work in their chosen profession and adapt to current trends, technologies and industrial scenarios by pursuing life-long learning.

COURSE OBJECTIVES

By the end of the course, students will be able to

- Understand Assembly concept with respective to mechanisms
- Fits and links application in automotive assemblies
- Understand drafting assembly, cross sections of assembly
- Display styles, combination views

Coordinator

HOD/MECH

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DEPARTMENT OF MECHANICAL ENGINEERING

MEA004 -MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES

SYLLABUS

Module I: ASSEMBLY THEORY
Understanding assembly theory Creating New Assembly parts Top Down assembly Bottom Up assembly

Module II: ASSEMBLY MECHANISM
Introduction to mechanisms role in assembly, importance of Degree of Freedom Basic Physical mechanisms like 4 bar mechanism, Rack & Pinion gear, Deltoid linkage, Gear meshing

Module III: SUB-ASSEMBLY THEORY
Listing the sub assembly components ordering the components seniority Making SAB number for each parts Location of sub assembly

Module IV: CONSTRAINT STATUS, ALIGN & MATE
Understanding Constraint theory Assembly constraint status, Constraints like Coincidence, Concentric, Pin, and Rigid

Module V: EXPLODING ASSEMBLY DESIGN
Exploring the dismantling method and analysis the errors in component structure Direction allocation for explosion, exploded line, BOM, Balloons

Module VI: DETAILING, ASSEMBLY DRAFTING DESIGN
Fourteen Geometric Characteristic Symbols, Common Modifying Symbols Used in Geometric Tolerance, Identifying the additional Symbols Used in Geometric Tolerance, Exercises Included for Practice.

Module VII: PRACTICE FOR AUTOMOTIVE ASSEMBLY
Rack & pinion assembly Sun-Plant gear assembly Differential unit assembly Transmission system

Coordinator

HOD/MECH

Head of the Department
Dept. of Mechanical Engg.
PERI INSTITUTE OF TECH.
Mannivakkam, Ch-600 048.

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

TIME TABLE

Course Code: MEA004 **Year/Semester: II/IV**

Course Name: Modeling Practice for Automotive Assemblies **Session: FN & AN**

Sl. No	DATE	HOURS	TOPICS
1	04.03.2023	1st-6th	Understanding assembly theory, Creating New Assembly parts, Top Down assembly- Bottom Up assembly.
2	08.04.2023	1st-6th	Introduction to mechanisms role in assembly, importance of Degree of Freedom, Basic Physical mechanisms like 4- bar mechanism, Rack & Pinion gear, Deltoid linkage, Gear meshing.
3	29.04.2023	1st-6th	Assembly constraint status, Constraints like Coincidence, Concentric, Pin and Rigid. Exploring the dismantling method and analysis the errors in component structure.
4	06.05.2023	1st-6th	Direction allocation for explosion, Exploded line, BOM, Balloons.
5	13.05.2023	1st-6th	Rack & pinion assembly, Sun-Plant gear assembly, Differential unit assembly, Transmission system.

Coordinator

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PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Participants Name List

Course Name - Modeling Practice for Automotive Assemblies

Course Code: MEA004

Year/Semester: II/IV

Sl. No	Registration Number	Student Name
1	411521114001	ABINESH L
2	411521114004	AVINASH A
3	411521114005	BHARANIDHARAN D
4	411521114006	BHARATHKUMAR M
5	411521114007	BRAGADEESH K
6	411521114009	GOKUL K
7	411521114010	GURUDHARSHAN S
8	411521114012	HARISH A
9	411521114013	HARISH M
10	411521114014	JAYAKANTHAN R
11	411521114015	JAYAPRAKASH E
12	411521114016	KAVIYARASAN M
13	411521114018	LOKESH B
14	411521114020	MUKESH KUMAR P
15	411521114021	PARAMESH A
16	411521114022	PRAVEEN S
17	411521114023	PREMKUMAR P
18	411521114024	RAGUL M
19	411521114025	SANTHOSH KUMAR S
20	411521114026	SARATHKUMAR S
21	411521114027	STEPHEN RAJ M
22	411521114028	SUJEETH S.S

Sl. No	Registration Number	Student Name
23	411521114029	SURENDAR N
24	411521114030	THAMIZHARASAN
25	411521114031	THAMIZHMURASU V
26	411521114032	THIRUMURUGAN V
27	411521114034	VALLARASU
28	411521114035	VIGNESH R
29	411521114036	VIGNESHKUMAR K.G
30	411521114037	VISHNU K
31	411521114301	AMERASON R
32	411521114302	ARUN K
33	411521114303	BOOMESH
34	411521114304	DHINAKARAN M
35	411521114305	GOWTHAM G
36	411521114306	HEMANATHAN A
37	411521114307	KALIL MOHAMED IBRAHIM A
38	411521114308	KARTHICK G
39	411521114309	KARTHIKEYAN M
40	411521114310	KAVIYARASAN B
41	411521114311	KISHORE K
42	411521114312	KISHORE U
43	411521114313	KUMARESAN V

Coordinator

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DEPARTMENT OF MECHANICAL ENGINEERING
ACADEMIC YEAR 2022-2023
Attendance Sheet
Course Name: Modeling Practice for Automotive Assemblies
Course Code: MEA004 **Year/Semester: II/IV**

Sl. No	Registration Number	Student Name	04.03.23	08.04.23	29.04.23	06.05.23	13.05.23
1	411521114001	ABINESH L					
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Sl. No	Registration Number	Student Name	04.03.23	08.04. 23	29.04. 23	06.05. 23	13.05. 23
23	411521114029	SURENDAR N					
24	411521114030	THAMIZHARASAN					
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Coordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.
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Vignesh T
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13/5/23

22/25

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

MEA004 Modeling Practice for Automotive Assemblies

1. Which software is commonly used for CAD modeling in the automotive industry?

   A) AutoCAD B) Solid Works C) MATLAB D) Blender

2. In CAD modeling, what does "CAD" stand for?

   A) Computer-Aided Design
   B) Computer-Assisted Drafting
   C) Computer-Animated Drawing
   D) Creative Architecture Design

3. What is the purpose of finite element analysis (FEA) in automotive assembly modeling?
   A) To simulate fluid dynamics
   B) To analyze stress and strain
   C) To optimize fuel efficiency
   D) To design aesthetic features

4. Which modeling technique is commonly used for simulating crash tests in automotive design?
   A) Finite element analysis
   B) Kinematic analysis
   C) Computational fluid dynamics
   D) Solid modeling

5. Which CAD feature is used to connect two components in an assembly?

   A) Extrusion B) Loft C) Mate D) Revolve

6. Which file format is commonly used for exchanging 3D CAD data between different software?

   A) .DWG B) .STL C) .IGES D) .PNG

7. Which of the following is NOT a component commonly modeled in automotive assemblies?
   A) Engine B) Wheel C) Wing D) Tailpipe

8. What is the purpose of tolerance analysis in automotive assembly modeling?

   A) To determine the cost of manufacturing
   B) To ensure parts fit together correctly
   C) To optimize aerodynamics
   D) To estimate vehicle performance

9. Which modeling technique is used to create smooth, flowing surfaces between specified curves?
   A) Fillet B) Sweep C) Loft D) Chamfer

10. Which type of material properties are typically input into FEA simulations for automotive components?

A) Mechanical B) Electrical C) Thermal D) All of the

11. What is the primary function of the suspension system in an automobile?

A) To provide stability during acceleration
B) To absorb shocks from the road
C) To increase fuel efficiency
D) To generate electrical power

12. Which CAD feature allows for the creation of a hollow component by removing material from a solid?

A) Extrude B) Shell C) Revolve D) Loft

13. Which type of analysis is commonly used to simulate airflow around a vehicle?

A) Finite element analysis B) Computational fluid dynamics
C) Kinematic analysis D) Stress analysis

14. Which material property is crucial for determining a component's ability to withstand high temperatures in an automotive engine?

A) Tensile strength B) Thermal conductivity
C) Coefficient of friction D) Young's modulus

15. Which CAD command is used to join two separate bodies into a single component?

A) Merge B) Combine C) Unite D) Attach

16. What is the role of CAM (Computer-Aided Manufacturing) in automotive assembly modeling?

A) To simulate crash tests B) To optimize fuel efficiency
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17. Which CAD feature allows for the creation of a feature that blends two different shapes smoothly?

A) Fillet B) Chamfer C) Loft D) Sweep

18. Which type of analysis is used to study the motion of components within an assembly?

A) Stress analysis B) Kinematic analysis
C) Thermal analysis D) Aerodynamic analysis

19. What does "DFM" stand for in the context of automotive assembly modeling?

A) Design for Maintenance B) Design for Manufacturing
C) Dynamic Finite Modeling D) Digital Fabrication and Machining

20. Which CAD command allows for the duplication of components within an assembly?

A) Copy B) Paste C) Pattern D) Duplicate

21. Which type of fastener is commonly used to join two sheet metal components in automotive assemblies?

A) Rivet B) Bolt C) Weld D) Screw

22. Which CAD feature is used to create a beveled edge on a component?

A) Fillet B) Chamfer C) Sweep D) Loft

23. What is the primary function of the braking system in an automobile?

A) To regulate engine temperature
B) To convert kinetic energy into heat
C) To generate electrical power
D) To provide stability during acceleration

24. Which type of analysis is used to predict the behavior of a component under various loading conditions?

A) Thermal analysis
B) Aerodynamic analysis
C) Stress analysis
D) Kinematic analysis

25. Which CAD feature allows for the creation of a feature by sweeping a 2D shape along a specified path?

A) Loft B) Extrude C) Revolve D) Sweep

V. Kishore 415221114312

13/5/23

21/25

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DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

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Boregowda 411521114001 13/5/23

15/25

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ACADEMIC YEAR 2022-2023

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PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: VIGNESH . R.

Register No: 411521114035

Year: 2/IV

Date of Feedback: 13/5/23.

Course Name: MEA004 / MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES

1. How do you value the course content?

Nearly good content.

2. How would you understand the content delivery by the instructor?

Can understand easily

3. Write the overall quality of the program

Excellent Program.

4. Will you recommend this program to your friends/juniors/seniors?

Yes I will Suggest

Suggestions to improve, if any: —

Vignesh

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: KISHORE. V

Register No: 411521114312

Year: 2/IV

Date of Feedback: 13/5/23.

Course Name: ~~MEA~~ 004/ Modeling Practice for Automotive Assembly

1. How do you value the course content?

Good content.

2. How would you understand the content delivery by the instructor?

Instructor explained very well.

3. Write the overall quality of the program

Very Good.

4. Will you recommend this program to your friends/juniors/seniors?

YES

Suggestions to improve, if any: —

V. Kishore

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: BRAGADEESH

Register No: AU521114007

Year: 2/IV

Date of Feedback: 13/5/25

Course Name: IMEA004 / Modeling Practice for Automotive Assembly

1. How do you value the course content?

   Excellent content.

2. How would you understand the content delivery by the instructor?

   Instructor was highly knowledged.

3. Write the overall quality of the program

   Best, informative

4. Will you recommend this program to your friends/juniors/seniors?

   Sure will refer.

Suggestions to improve, if any:

NIL.

Signature of the Student

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. VIGNESH.R

of II Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES** held from **04/03/2023** to **13/05/2023.**

PRINCIPAL | VICE PRINCIPAL | HOD | COORDINATOR

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DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. KISHORE.U

of II Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES** held from **04/03/2023** to **13/05/2023.**

PRINCIPAL | VICE PRINCIPAL | HOD | COORDINATOR

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INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Organizes

ADD ON COURSE IN

"MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES"

CERTIFICATE
OF PARTICIPATION

This is to certify that Mr / Ms. PRAGADEESH.K

of II Year, Mechanical Engineering, PERI Institute of Technology has completed an add on course in **MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES** held from **04/03/2023** to **13/05/2023.**

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