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)





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

ACADEMIC YEAR 2022-2023

ADD ONCOURSE/WORK SHOP/CERTIFICATE COURSES

Sl .No	Description	Page No.
1	Add on Course on Auto CAD-CIVIL	1-28
2	Add on Course on Introduction to Non Destructive Testing and QA/QC-CIVIL	29-51
3	Add on Course on Data Scienece-CSE	52-71
4	Workshop on Artificial Intelligence and Data Science-CSE	72-89
5	Workshop on Artificial Intelligence-CSE	90-109
6	Add on Course on Robotics and its application-ECE	110-127
7	Add on Course on Advanced JAVA Programming -ECE	128-148
8	Add on Course on Ethical Hacking-ECE	149-171
9	Add on Course on Embedded C-EEE	172-192
10	Add on Course on Modeling for Design Engineers-MECH	193-215
11	Add on Course on Small Unmanned Aerial Vehicle – DroneoS-MECH	216-241
12	Add on Course on Modeling Practice for Automotive Assemblies- MECH	242-264





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

Brokeryled PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai - 600 048

PERI Institute of Jernhology,

Head of the Department HOD/CIVIJ neering

Mannivakkam, Chennai - 600 048



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	[]	04-02-2023 to 06-05-2023	1.15p.m-3.40p.m

Co-ordinato 28/1/23

Head of the peoperiment
Head of the peoperiment
Head of the peoperiment
Perl 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 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 for 50 marks

Part A – AutoCAD Sketch

Coordinato

Senior Faculty Member

Industry Expert

Head of the Benartment
Department |
Departme

Dr. R. PALSON KENNEDY, M.E.

PEŘÍ INSTITUTE OF TECHNOLOGY Mannivakkam, Chennaí - 600 048.



AutoCAD

SYLLABUS MANUAL

acely

- > 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 (0)
- > Move (M)
 - & Base point
 - Displacement (D)

- > 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)

- > Spline (SPL)
 - Methods (M)
 - Knots (K)
 - ❖ Object (0)



- > 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)

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



- * Rotated (R)
- > Aligned Dimension (DAL)
 - M text (M)
 - Text (T)
 - ❖ Angle (A)

- > 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 (0)
- ➤ Multileader (MLEADER)
- > Multileader edit (MLE)
- ➤ Multileader collect(MLC)
- Multileader align(MLA)
- ➤ Multileader style (MLS)



- > 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

AutoCAD

- > 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



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) □ Multiple (M) Fillet (F) □ Undo (U) □ Polyline (P) □ Undo (U) □ Polyline (P) □ Undo (U) □ Distance (D) □ Radius (R) □ Trim (T) □ Multiple (M) Properties (PR) □ Line Properties □ Match properties □ Object □ Settings , Layers
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) □

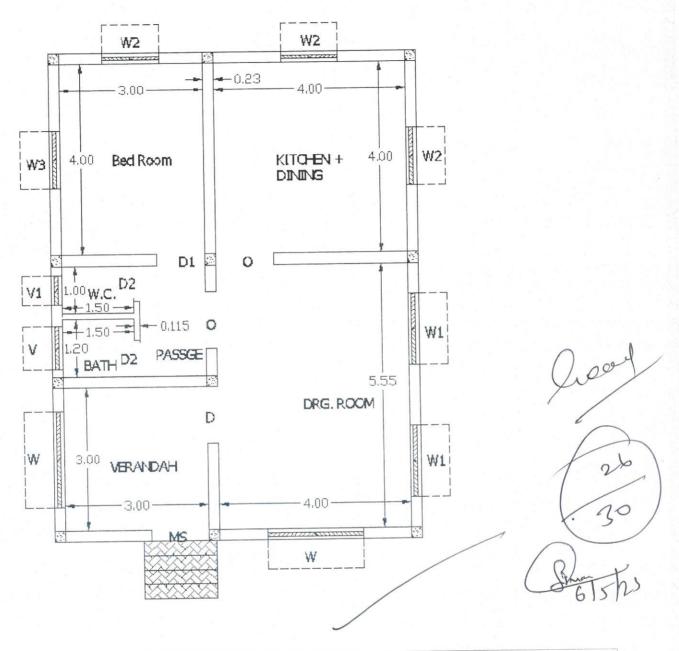


ADD ON COURSE-TIME TABLE

AutoCAD Course

			$point \Box Join (J) \Box Explode(X) \Box Region (REG)$
0	01.04.2023	6,7,8	Layout (LO) \Box Layout wizard \Box Multi view (MVIEW) \Box View ports (VPORTS) Viewport maximum (VPMAX) \Box Viewport minimum (VPMIN) \Box LAYVPI \Box Model space (MS) \Box Paper space (PS) \Box Model, Tilemode (TI), Attributes (ATT) External reference (XR) \Box Page Setup Manager \Box Plot (Ctrl+P) \Box Sheet set(SSM), Export(EXP) Options (OP), Image(IM) \Box Imageadjust \Box Imageattach Imageclip \Box Imagequality \Box Imageframe \Box Title block creation \Box
8	22,04,2023	6,7,8	Isometric views □ Isoplane change □ Ellipse(EL), Isocircle, Isometric practice, 35 and 4 and 5 and 5 and 5 and 6
9	22.04.2023	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
10	29.04.2023	5.67	UCS icon □ Dynamic UCS □ Viewport □ Creating 3D Models (practice
111	06.05.2023	5,6,7	session), Material browser \square Assigning materials \square Assigning selected materials to object \square Basic rendering \square Creating new materials Default light \square Point light Spot light \square Distance light, \square Camera \square Walkthrough \square Motion recorder \square Import
12	06.05.2023	8	Internal Assessment 2

Head of the Department Department of Civil Engineering PERI Institute of Technology, Mannivakkam, Chennai - 660 U48



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



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





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. c. MA



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
3.110.1	411521103002		II	B. Asha	3.1	B. Aldr.	B. Alask	B. Hold	2-Him	B. Alaska.	BALLE	B. Andi	B.AA	BALL
2		Gokul Chandran	П	Ablacha	Scondus	& bolando	Stoliber a	L'Glelche	S. Colos	Sldan	Scollas	Scolch	Stoleleha	& Colonel
3	411521103006		П	V. Kawhya	Maurilya			Meaning	Vilentisa	V. Kenglye	Vi Kaylya	VI Campie	y langue	V. Correga
4		Pratheep kumar P	II	P. Prothesp	P. Pathup	9- Rothup	1) Worther	P. Bretterp	7. Kothop	1: prothe	Protug	Proto	Poloethy	12 18 atta
5	411521103008		II	Boark.	R. Pad	B Jak	Botale	R. Radal.	B. Lald.	Bitaldi	B. Cabb	Black	Bilake	Bols.
6	411521103009		II	Thanin.	tharun	Tharm	(B)	Tharin	tharen	(A0)	Thabun	thamin	Tham	thamin
7	411521103010	Thenmozhi V	II	Thenmoshi	Thypi.	thutki	Thuthi	taughi	Thuthi	· thushi	- C 1	000		000
8	411521103011	Thunga Siresh S	II	Stil	Solid	Sout	fisiel	J. Sinh	distribut	Stick	Sadiul	Strah	Sofind	Libite.
9	411521103013	Vasunthara A	II	1 men	voen	vos	Vaen	Vale	Vosu	Vaen	Val	Vasu	John	Jose o
10	411521103301	Arun S	II	S. Alm	S. Amn	S. Alm	Amus.	1 Suns	17 m.S	Aun S	6 Mms	1-Mm)	A	Aruns
11	411521103302	Bhuvaneshwari S	II	5. Pluse.	S. Rhue.	S. Bhr.	S. Blug.	S. Runor		S. Bhilings	S. Rhyon	S. Blues	5. Bhune	
12	411521103303	Ezhilarasan U	II	Vitabil	U. Ezhi	Vicely	UFZh	U.Echi	ViEsh	ruteh	Uitzhil	V. Eshi		J. Crokey
13	411521103304	Gokul Raj J	II	J-Ookw	J. Defu	7 10	-	J-broce1	J. Gotal	J. Gokal	Finolcul	J. broke		
14	411521103305	Gurumoorthy S	II	GIVEN	GURU	MURU	GURU	(AG)	GURU	GURU	GURU	GURU	GURU	CHURN
15	411521103306	Janarthanan G	II	Glove	a-Jone	Con	Com	G Jan	(1) our	Calans	G. Jana	Co- Jorg	Chan	6 tapen
16	411521103307	Kamalakannan T	II	9. Kons	9. Kn	mkn)	Tiby	Y.K.	KK	Ely	THE	TH	THE	The same
17	411521103308	Manikandan J	II	J. Noni	J. Mari	S. Mari	2. Mari	Dollari,	2. Mari	Sillari	2. Mani	dellaus	Many	Moni
18	411521103309	Parthiban E	II	Vartiba	Laviliba	two ban	tonliba	1 certion	Partiba.	tartha	Cr Thom	terliba	D. 10	2 ledle
19	411521103310	Rajesh R	II	Rales	Rotesh	Rojes	ROTE	ROLL	Popula	Region	Revent	Day	Rayer	Roteth
20	411521103311	Rijish Kumar M	II	Rijithteuro	Rijishtomes	RUISIR	Poishere		-	Rijishtupo	Ryshitum		Pajishara	
21	411521103312	Selvam S	II	S. Sel.	D. Seh	Sish.	S. Sel	S. Selver	S. Sels.	S. Soh.	S. Sehr.	S. Selv.	S. Sh.	S. Solia
													1	



ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No.	411521103005
Name of the St	ident: 5 GOICUL CHANDRAN
Date	6/5/2023
Name of the Ti	ainer: MY! SiMSOO

.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 ($\sqrt{\ }$) 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?		1		
3	How much interesting was the session for you?		1		
4	Did the course covering full fill your expectation?			1	
5	What is your opinion about value added course?				
6	Was the session interactive?		1		
7	The content was organized and easy to follow.				
8	The instructors explained the session well and provided practical training.		7		
9	Overall effectiveness of the course?			7	
10	I will recommended this seminar /workshop /conference/Value added course to other conservators				

Any suggestions do you have for improving the events?



ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No.	411521183308
Name of the S	Student: MANIFANDAN : J.
Date	. 06/05/2003
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 ($\sqrt{\ }$) 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?		P		
2	How relevant was the content discussed by the resource person?		1	-	
3	How much interesting was the session for you?	ow much interesting was the session for			
4	Did the course covering full fill your expectation?				
5	What is your opinion about value added course?		1		
6	Was the session interactive?		1		
7	The content was organized and easy to follow.		1		
8	The instructors explained the session well and provided practical training.	1			
9	Overall effectiveness of the course?	7			
10	I will recommended this seminar /workshop /conference/Value added course to other conservators		1		

Any suggestions do you have for improving the events?



ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No.	· H11521103302
Name of the	Student: BHUVANESHIAIARI. 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 ($\sqrt{\ }$) 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?		1		
2	How relevant was the content discussed by the resource person?		1		
3	How much interesting was the session for you?				
4	Did the course covering full fill your expectation?	overing full fill your			
5	What is your opinion about value added course?	$ \uparrow $			
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?

Zhuvanait. S.



ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No.	411521103007
Name of the Stud	dent: P. Pratheep Kumar
Date	61512023
Name of the Tra	iner: 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 ($\sqrt{}$) 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?		1		
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?		1		
10	I will recommended this seminar /workshop /conference/Value added course to other conservators		1		

Any suggestions do you have for improving the events?



ADD ON COURSE

AutoCAD Course

STUDENT'S FEEDBACK

Reg.No.	4/15/2/103310
Name of the	Student: R. RAJESH
Date	6/5/2023
Name of the	Trainer:Man. Sim Sen

.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 ($\sqrt{\ }$) 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?	8	1		
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.	0			
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?



Organizes

ADD ON COURSE IN

"GYA012-AUTO CAD"

CERTIFICATE

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

studying

11 not

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.

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ADD ON COURSE IN

"GVA012-AUTO CAD"

CERTIFICATE

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

studying

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.

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Ozganizes

ADD ON COURSE IN

"CVA012-AUTO CAD"

CERTIFICATE

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

studying

11 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.

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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

HOD/CIVIL

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

Or. R. PALSON KENNEDY, M.E., Ph.D.,
PPRINCIPAL OF TECHNOLOGY
PPRINCIPAL Chennal - 600 048.
Monnivarkam, Chennal - 600 048.



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-ordinators Wy

Head of the Department DepHeadcott the Object the first PERI Institute of Technology, Mannivakkam, Chenna - 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 $-30 \times 1 = 30$ marks

Coordinator

Senior Faculty Members 23

Industry Expert

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

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL

Monniversam, Chemia - ool oo



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



ACADEMIC YEAR 2022-2023

ADD ON COURSE-TIME TABLE

CVA035-INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

S.No	Date	Hours	Topic
		6,7,8	Concepts of Non-destructive testing-relative merits and limitations, NDT Versus mechanical testing. Fundamentals of
1	04-02-2023	. 7.0	Visual Testing, vision, lighting Material attributes, environmental factors, visual perception.
2	11-02-2023	6,7,8	direct and indirect methods, mirrors, magnifiers, boroscopes.
2	11-02-2023	6,7,8	Liquid Penetrant Inspection: principle, applications. advantages and limitations, dyes, developers and cleaners. Methods &
3	18-02-2023		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.
		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
5	04.03.2023	8	Internal Assessment 1
6	18.03.2023	0	
	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.
7		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
8	01.04.2023		Thickness determination by ultrasonic method Radiography Testing: Sources-X-rays and Gamma rays and their
9	22.04.2023	6,7,8	characteristics-absorption, scattering. Filters and screens, imaging modalities-film radiography and digital radiography.
	20.04.2022	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.
10	29.04.2023	567	NDT tests for assessing quality of hardened concrete, structura
11	06.05.2023	5,6,7	steel, welds and joints, repair and retrofitting applications.
12	06.05.2023	8	Internal Assessment 2

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



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.,
PRINCIPAL

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048.



ADD ON COURSE INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

ATTENDANCE SHEET Name of the YEAR 04-02-2023 11-02-2023 18 ₁ 02-2023 25-02-2023 04.03.2023 25.03.2023 01.04.2023 22.04.		'
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18 411520103312 Suvam Karımakar III (18 18 18 18 18 18 18 18 18 18 18 18 18 1	whater verte tea	Nembelogh
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25 411519103005 Sathish Kumar V IV Sithill Sathish Land OR What What William V2		Malasto
26 411519103006 Ushananthini M IV Ochanthini M	la lathi	1 D
27 411519103301 Malathi S 1V Malathi S 1V	Le love	
28 411519103302 Vigneshwaran D IV	1	





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
	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 resources
- 1	for extreme radiations?
	a) Fibrescope
	b) Chamberscope
	c) Periscope
	d) Vacuum borescope
16	. Which of the following is not true for rigid horescopes?
	a) Operates like telescope in reverse
	b) Good for rapid examination
	c) Video adaptation is present
	d) Semi Rigid sheathing is present
7	Which of the following option is true for the given statements about flevible fibrescence?
	Statement 1: Fibrescope produce higher resolution than videoscope.

	Statement 2: Videoscopes have longer working length than fibrescope.
	a) 1, 1
	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 (MDT):
	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
	to the magnetic field
	(a) 270 Degree C
	(b) 90 Degree C
	(c) 180 Degree C
	(d) 45 Degree C
4	Which of the following can be magnetized
	(a) Iron
	(b) Nickel
	(c) a & b both
_	(d) None of the above
5	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



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	K.fu

Q.NO	OPTION								
1	A	6 .	A	11	C/	16	D	21	D
2	A	7	A/	12	B	17	0/	22	C
3	0/	8	8/	13	B	18	C/	23	BA
4	A/	9	Bd	14	0	19	c/.	24	c /
5	D	10	cL	15	c/	20	BL	25	D

22 25 e. Mby



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	W.
STUDENT NAME	SATHYA . J	Signature	Sathya, 5

Q.NO	OPTION								
1	A	6	A	11	-	16	n d	21	0
2	A	7	0	12	R	17	Ad	22	c
3	Bd	8	2	13	B	18	C	23	B/
4	6	9	20	14	cl	19	c /	24	c /
5	6	10	0/	15	0	20	C	25	D





ADD ON COURSE-ASSESSMENT -II

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

Year/Sem/Sec	111/V1	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:
	Tools 1
	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
2	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

	(-)	N .				
	(c) (d)	Magnesium, titanium and steel 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.				
10	(d)	remains the same but velocity decreases				
12	X-rays penetr	rate human body and matter because it is radiation.				
	a) electromag	netic radiation				
	b) longer way	relength				
	c) shorter way	velength				
	d) invisible					
13	X-rays are rac	liations then ultraviolet light.				
	a) higher ener	gy				
	b) lower energ	339				
	c) lower frequ	ency				
	d) longer wave	e length				
14	During radiog	raphy of human body a will appear as darkest regions				
	a) Crack					
	b) Bone					
	c) Muscle					

	d) Skin
1.5	
15	White radiation Consists of wavelength light.
	a) Single
	b) Two
	c) Three
16	d) multiple What is a destructive test?
10	a) Destructive tests are applications for 1 and G
	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 material
	such as pressure testing
	c) Destructive tests are applications for detecting flaws in materials with impairing the
	userumess
	d) Destructive tests are applications for detecting flaws that do not impair the use of the
1.00	materials such as pressure testing
17	is the collective term for the physical manifestations of the defects like cracks
	spaning, pop out, staining and corrosion.
	1. Preservation
	2. Distress 3. Defects
	4. Failure
18	
10	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
1	What is used for marking out steels?.
	A. Engineers blue.B. Wax crayon.C. Copper sulphate D.None
2	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

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			
: 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			
: 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			



ADD ON COURSE-ASSESSMENT -II

"INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

WRITE THE OPTIONS IN THE GIVEN SPACE

D	
Date	06.05.2023
Duration	45 minutes
Marks Obtained	2.4
Signature	1
	Marks Obtained

Q.NO	OPTION								
1	Bd	6_	Br	11	A	16	BC	21	
2	C	- 7	C/	12	C	17	B	22	0
4	0/	8	Br	13	AC	18	c	23	Br
5	0	10	C./	14	A	19	3/	24	C /
			150	1.0	91	20	3	25	0/

73



ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENT'S FEEDBACK

Reg.No.	411520103001
Name of the Stu	ident: ARUN K
Date	: 06 05 023
Name of the Tr	ainer: Mc 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 ($\sqrt{\ }$) 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	1			

Any suggestions do you have for improving the events?

Signature of the student



ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENT'S FEEDBACK

8	411520103310
Name of the S	tudent: Sathya J
Date	06/05/0023
Name of the T	rainer: MS: LAVANA

.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 ($\sqrt{\ }$) 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?	\$; 	V		
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?		X		
5	What is your opinion about value added course?		/		
6	Was the session interactive?		V		
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	1			
	conservators				

Any suggestions do you have for improving the events?

J. Sathya.
Signature of the student



ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC

STUDENT'S FEEDBACK

Reg.No.	: A1151910300b
Name of the St	udent: USHANANTHINI , M.
Date	06/05/0083
Name of the T	rainer: MS: LAVANVA

.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 ($\sqrt{\ }$) 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?		1		
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?		1		
6	Was the session interactive?	^			
7	The content was organized and easy to follow.	1			
8	The instructors explained the session well and provided practical training.		1		
9	Overall effectiveness of the course?	1			
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



DEPARTMENT OF CIVIL ENGINEERING ADD ON COURSE

INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC FEEDBACK ANALYSIS

		Dating Free Head	(1) 1/ 1/2) C	1/2) D //	FEEDBACK A	NALYSIS						
21		Kating:Excellent	How much the session was useful from knowledge and information point of view?	How relevant was the content discussed by the resource person?		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.	explained the session well and provided practical	Overall effectiveness of the course?	I will recommended this seminar /workshop /conference/Value added course to other conservators
S.No.	Register Number	Name of the Student								training.		
1	411520103001	Arun K	2	2	1	3	3	2	2	•		
2	411520103003	Gokulnath H	2	2	2	2	3	2	2	1	3	,
3	411520103004	Guneshdharan K	2	2	1				2	2	2	1
4	411520103005	Nisha C	2	2	2	3	2	2	2	1	2	2
5	411520103006	Ragul E	2	2	2		2	2	2	2	3	1
6	411520103007	Saravanan M	2	3	1	2	2	2	2	1	2	2
7	411520103008	Sivaraman V	2	2	2	3	1	2	3	1	2	1
8	411520103009	Swetha T	1	2	3	2	2	2	2	2	3	2
9	411520103302	Bruno Joseph Aravindraj KB	1	2	1	2	2	2	2	3	2	1
10	411520103304	Indraraj N	2	2	2	3	2	2	2	2	2	2
11	411520103305	Kamesh B	2	2	2	2	2	2	2		3	2
12	411520103306	Kandeeban P	2	2	2	2	1	2	2	2	2	2
13		Kathiravan S	2	2	2	3	1	2	2	2 2	2	2
14	411520103308	Raghul S	2	2	1	2	1	2	2	1	3	
15	411520103309	Ranjithkumar R	2	2	1	2	2	2			2	
16	411520103310	Sathya J	2	2	1	1	2	2	2 2	1	2	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		Vanchinathan M	2	2	2	2	2	1	2	2	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
23	411519103003	Gopi Anand D	2	2	1	2	1	1		1	1	
24	411519103004	Ranjith R	2	2	i	2	1	1	1	1	1	1
25	411519103005	Sathish Kumar V	2	2	1	2	2	-	1	2	1	1
26		Ushananthini M	2	2	1	1	2	1	1	2	1	<u> </u>
27	411519103301	Malathi S	2	2	1	i	1	1	1	2	I	1
28	411519103302	Vigneshwaran D	2	2	1	1	2	1	2	2	1	1





Organizes

ADD ON COURSE IN

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

CERTIFICATE

	This is to co	ertify that Mr / Ms. K. ARUN (411520103001)
studying	111 rd	year in the Department of Civil Engineering has successfully completed the course
on CVA035	- INTROD	UCTION TO NON DESTRUCTIVE TESTING AND QA/QC for the duration
of 32 hours	in the perio	od from 04/02/2023 to 06/05/2023 during the Academic year 2022 - 2023.

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ADD ON COURSE IN

"CVAO35 - INTRODUCTION TO NON DESTRUCTIVE TESTING AND QA/QC"

CERTIFICATE

	This is to certify that Mi	r / Ms	BATHYA	(411520103310)
studying	un rd year in the l	Department of Civi	l Engineering	has successfully completed the course
on CVA03	5 - INTRODUCTION TO	O NON DESTRU	CTIVE TESTI	NG AND QA/QC for the duration
of 32 hours	in the period from 04/0	2/2023 to 06/05/2	2023 during th	ne Academic year 2022 - 2023.

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

CERTIFICATE

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

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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. IOAC
- 4. Faculty Members CSE Staffs
- 5. Main Notice Board

Mannivakkam, Chennai 600048

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

Coordinator

Semor faculty member

PRP

Dr. R. PALSON KENNEDY, M.E., Ph.D.

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048

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		13-03-2022 TO 17-03-2022
	DATA SCIENCE	TIME : 8.30 AM – 3.30 PM
		VENUE: PERIIT CONFERENCE HALL
Participation	IV YEAR CSE STU	UDENTS



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	FN & AN	Introduction to data science- Exploratory data analysis-Introduction to machine Learning, Linear regression and regularization.
TO 17-03-2022 TIME:	FN & AN	Model selection and evaluation-Classification: kNN, decision trees-Classification: SVM,Ensemble methods: random forests-Intro to probability: Naïve Bayes and logistic regression.
8.30 AM – 3.30 PM VENUE:	FN & AN	Feature engineering and selection-Clustering:k-means,hicrarchical,clustering-Dimensionality,reduction: PCA and SVD
CONFERENCE HALL	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



Mannivakkam, Chennai 600048

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



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)

SN o.	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
9.	411519104011	Chitra. C
10.	411519104012	Dayana K
11.	411519104013	Deepak Kumar A Bhagat
12.	411519104014	Dhaneshkumar M
13.	411519104016	Dinesh Kumar.N
14.	411519104017	Divya. G



15.	41151910401	Gabriel Nixson Jones.J
	112151010	Jones.J
16.	41151910401	9 Gokul.R
17.	41151910402	0 Gopinath.V
18.	41151910402	1 Gownori Jasmitha
19.	41151910402	2 Hariharan B
20.	41151910402	3 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

The sale who was

Coepshall

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 Vams 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

Degrana

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

Dr. R. PALSON KENNEDY, M.E., Ph.D.
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Mannivakkam, Chennal - 660 048



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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)

SN o.	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	Akak	18014	AVOL	H.	AKOK.
2.	411519104002	Althaf Khan G	atal	atter	atal	altal	atta
3.	411519104003	Ansul Jafera	Lind	And	Soul	Som	Soul
4.	411519104004	Arulmani.G	The	The	All	Ano	Jane
5.	411519104005	Augustin Raja J	Swit ?	Sul	Au	AND	Sul
6.	411519104006	Ayesha Munawar M	Auch	Aysh	Augeth	Ayeh	Auch
7.	411519104007	Babyswetha.P	Salone	Balag	Bala	Bales	Beelop
8.	411519104010	Blessy Evangelin L	Blerry	Bless	Blessy	Blossly	Blessy
9.	411519104011	Chitra. C	Chitra	Chitra	Chitra	Chita	chita
10.	411519104012	Dayana K	Sany.	Drug	Dany	Dwy	Drug
11.	411519104013	Deepak Kumar 4 Bhagat	Vina, Desky	Doesel	Joine	Perpu	Doral
12.	411519104014	Dhaneshkumar M	2hm	Dh	Inde	-D/m	-19h
13.	411519104016	Dinesh Kumar.N	Biresh	Finalh	8 inesh	8 inesh	Firesh
14.	411519104017	Divya. G	Dyel.	Dingo	Dens	Dipte	Dily

15.		Gabriel Nixson	
	41151910401	8 Jones. J ON GRU (N) CRU	15
16.	411519104019		2 (
17.	411519104020	O Gopinath.V	108
18.	411519104021	1 Gownori Jasmitha Gram Com fun Com	6
19.	411519104022	2 Hariharan B	
20.	411519104023	Hariharan.R 4 10 11 10 11 10 11 10	,
21.	411519104024	Hariharan S	Th
22.	411519104026		1
23.	411519104027	Hand How How How	
24.	411519104028	O TOUR TOUR TOUR TOUR TOUR TOUR TOUR TOU	~
25.	411519104029	Jasmine Jenifer Mary X Jasmine Jenifer Mary X	1
26.	411519104031	Kabil J Kabil Kabil Kabil Kabil Kabil Kabil	,
27.	411519104032	Kalaivani K M & W Kalij Kabol Kabo	+
28.	411519104033	Pavan Kaligiri Paman Paman Paman Paman Paman	2
29.	411519104034	Karthick. A Marchiel of the 10 1 100	
30.	411519104035	Keerthana. V J. De'l Laft Longton Foother	-
31.	411519104036	Kishore C	an
32.	411519104037	Kishore.U	h
3.	411519104038	Kumaravel B M 10 10 10 10 10 10 10 10 10 10 10 10 10	5
4.	411519104039	Lakshmi Priya.S Lakshmi Priya.S	-
5.	411519104041	Logeshwaran S 1 2 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2 2 2	
	167 1940 2	Love Josep Legen Legel Legel	5
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36.	411519104042	Malavika.M	Holan	relan	1600	red on	18ace
37.	411519104043	Manasa A	Mona8a A	manage, A	Marose LA		maro sa.A.
38.	411519104044	Mani Bharathi. B	Maishod	Manisoff	manibul	markell	MariButh
39.	411519104045	Manikandan.V	manita	manuf	manit	manle	manh
40.	411519104046	Mareeswari.M	Mornes	Moan	Marr.	Mane	man
41.	411519104047	Medepalli Yadidya		redophi		naldi,	madal
42.	411519104048	Mohamed Hameed N	mhan	quolond	mad	marand	more
43.	411519104049	Mukesh.S	makes		medade	mukul	makes
44.	411519104050	Muthukumar M	shahir.	0	7 11	Mithesh	Neish
45.	411519104053	Nandhini. J	March	1 to reller	valle	a knowledge	
46.	411519104054	Naveen L	Jane .	Marin	Vana	Nama	Namen
47.	411519104060	Ben Joseph.P	Banjord	Bajorh	Burjoh	Balah	Bejoh
48.	411519104093	Swetha.C	Rook	EN	Frech	south.	much
49.	411519104302	Balaji R	Di	Blue	Rhy	Bayli	Bulouj:
50.	411519104040	Linga Sai Dhathri	(mg SW)	Tirle	ligh	Ingl	loge
51.	411519104051	Nallapaneni Vamsi Krishna	Keehna	Keelhaa	Krishna	Keesha	Kushna
52.	411519104052	Namburi Srinadh	AA	The c	TOTAL	two	The
53.	411519104055	Naveenkumar.D	D	MP		D	A
54.	411519104056	Naveen Kumar .M	valle	lon lon	pen	Ry	X
55.	411519104057	Nedunseraladhan S	Nedm	Nedh	Medu	Nedu	Nedh
56.	411519104058	Parthiban D	Doff:	23.	DA.	ROT	BUT

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57.	411519104061	Pavithra.M	Daniel	Dout,	Tous	Daniel	Tank
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58.	411519104062	Poli.Sunil	not s	mors:	nda	hola	polish
59.	411519104063	Ponduri.Sri Sushma	pour	med	PROF	18th	holes.
60.	411519104064	Pooja M	Pages	Pargh	Rayla	Pauj a	Panjan
61.	411519104065	Pradeep. T. R	Roley	Prodeul	prodop	Prolap	proder
62.	411519104066	Prakash.R	Prakash	Proket	Prayher (prestof	Beker
63.	411519104067	Praveen Kumar.S	Poamform	Pranken	Prambus	Pramken	Pranker
64.	411519104068	Praveen Kumar.G	Bars	Jank -	Parker	John .	Parch
65.	411519104069	Priyadharshan V	Pamo	Prium	Priyan	Prijow	Phigan
66.	411519104070	Priyadharshini.M	pougal	Donder	bense	Wanter 1	bung
67.	411519104071	Raghava R	Doghe	Ragher	Daylo	Dala	Palme
68.	411519104072	Rajamurali. M	Rajahn	Rajne	Rajath	Rajam	Rajam
69.	411519104073	Revathi S	Revolv	Parish	Rante	Rarafa	Proof
70.	411519104040	Linga Sai Dhathri	Jus	du	2m	Am	Jan Jan
71.	411519104051	Nallapaneni Vamsi Krishna	July	when	m	M	M
72.	411519104052	Namburi Srinadh	alu.	m	ma	man.	mit.
73.	411519104055	Naveenkumar.D	James	Naule	Navid	Namb	Name
74.	411519104056	Naveen Kumar .M	Jamesk	wante	panul	Wahil	Now.
75.	411519104057	Nedunseraladhan S	Nells	pode	holle	Noll	redle
76.	411519104058	Parthiban D	Parther	Pashet	Palthel	South	Plan
77.	411519104061	Pavithra.M	Parishe	Pavidh	faithme	Pari de	Paul
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78.	411519104062	Poli.Sunil	POB.S.	Pals.	Polis	Reli- Sul	Polish
79.	411519104063	Ponduri.Sri Sushma	28-	Rof	B	PS	Dil
80.	411519104064	Pooja M	Jungar	Dy	Ruge	Proje	Rusija
81.	411519104065	Pradeep. T. R	Roods	Prade	prade	bad	bal
82.	411519104066	Prakash.R	Per la	A. A.	mi	July 1	ans-
83.	411519104067	Praveen Kumar.S	s.Pem	S.Pm	S.Plan	S. Pam	5.Phm
84.	411519104068	Praveen Kumar.G	Drawn	Dari	Draw	100	Bu
85.	411519104069	Priyadharshan V	Prised	la la d	pride	B 10	2-10.
86.	411519104070	Priyadharshini.M	· Rus.	Del	Dus	Digo	proof
87.	411519104071	Raghava R	Doughou	Ryghue	Pagha	Rad	Profes
88.	411519104072	Rajamurali. M	Rada	Vida	Rocha	n e	00-10-
89.	411519104073	Revathi S	Records	Rengtu	Rock	Roepha	Daroli
90.	411519104040	Linga Sai Dhathri	1 ogus	-\ Tugg	- Locals	agera	e gari
91.	411519104098	Vikram Rj	Vikhm	Vikum	Vikeno	Viken	Viklan
92.	411519104099	Vishwa C	Viel		8	Valori	VIRIAM
93.	411519104100	Yokesh S	If heel	the state of	Helish	y. birl	Hakely
94.	411519104101	Yuvashree.R	Kennt	1 London	V	Valor	V
95.	411519104098	Vikram Rj	MKM	rike	Vikoro	viden 1	inhows

Co-ordinator

HODE

Colepanne

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE:	17	03	20	22
-------	----	----	----	----

Name of the Student: POGA.M Register No: 411519104064 Year/Semester 11

Course Code: CSAO77

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

Poof M Signature of the Student

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE: 17/3/22

Name of the Student: Malarike	. M
Register No. Alles Giota Ch. 2	(" (
Register No: 411519104042 Year/Semester 111	
Course Code: CSA 077	
Course Name: Daa Science	2

1. What is your assessment of the course material?

First thee topic in the portion 1

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

The instructor's delivery of the content

in easy and undelstandable 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 called

5. Suggestions for enhancement, if any:

Nil

Signature of the Student

M. Milika





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Cryanizes

ADDON COURSE IN

"DATA SCIENCE"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. (Y) ANA SA
ofYear, Computer Science and Engineering, PERI Institute of
Technology has completed an addon course in DATA SCIENCE held from 13th March
2023 to 17 th March 2023.

PRINCIPAL

COURSE COORDINATOR

www.peri.education

PERI Knowledge Park, Mannivakkam, Chennai - 600048





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Caganizes

ADDON COURSE IN

"DATA SCIENCE"

CERTIFICATE OF PARTICIPATION

	This is to cer	tify that Mr / Ms. MALAVIKA . M.
of	<u> </u>	_Year, Computer Science and Engineering, PERI Institute of
Technology	nas complete	d an addon course in DATA SCIENCE held from 13th March
2023 to 17 th	March 2023.	
	1	

PRINCIPAL

COURSE COORDINATOR

www.peri.education

PERI Knowledge Park, Mannivakkam, Chennai - 600048





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Cryanizes

ADDON COURSE IN

"DATA SCIENCE"

CERTIFICATE OF PARTICIPATION

COURSE COORDINATOR

	This is to cert	ify that Mr / Ms	_
of	<u>jj</u>	Year, Computer Science and Engineering, PERI Institute o	f
Technology	has complete	d an addon course in DATA SCIENCE held from 13th March	1
2023 to 17 th	March 2023.		4
	01 0		

www.peri.education

PERI Knowledge Park, Mannivakkam, Chennai - 600048



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

Ref: PERHT/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

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

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	articulars Session Topic covered			
		Module 1: Foundational Concepts and Techniques		
DATE: 21/03/2023 -	FN & AN	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.		
24/3/2023		Module 2: Machine Learning Fundamentals		
TIME: 8.30 A.M To 3.30 P.M	FN & AN	Supervised Learning: Regression (linear, logistic), classification (kNN, decision trees). Unsupervised Learning: Model Selection and Evaluation-Introduction to Deep Learning: Artificial neural networks, basic concepts		
3.30 1 .101		Module 3: Data Engineering and Management		
VENUE: CONFERENCE HALL	FN & AN	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		



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

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

SN o.	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. 41152110401		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

Coeferna

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.	

1000/01/

101		
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
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

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

SN o.	Register Number	Name of the Student	21.03.23 22.03.23 23.03.23 24.03.23
1.	411521104001	Abdul Majith A	Aboullage the Aboullage the Aboullage the Aboullage
2.	411521104002	Abishekraj K B	and and suffer
3.	411521104003	Abinash S	S. Abstrack S. Abirat S. Abirat
4.	411521104004	Adnan Mohammed S	21212
5.	411521104005	Akash Jebaraj I	Anti and And
6.	411521104006	Annamalai M	(A) (A) (A)
7.	411521104007	Archana B	Southern Archier Arch Avel
8.	411521104008	Arokia Anushya A	AB John Auf. But
9.	411521104009	Arul Pandian P	August Loulpoli Amal Sul
10.	411521104010	Ashwin V	Q. Aut Q. Aut Q. Aut Q. Aut
11.	411521104011	Bargavi A V	Bry Prew Prin Pace
12.	411521104012	Bhuvanesh G	The Bur. By By
13.	411521104013	Chandrakala V	Charles chilere chile chie
14.	411521104014	Chandru B S	(harden &s clare charden chard
15.	411521104015	Damodaren V	Denny Don't Damadan Do

16.	411521104016	Dayana M	M. Dayam	M. Dayana	H. Dayana	M. Dayang
17.	411521104017	Deepak J	Dorby	SoePark	D. Por	Sol
18.	411521104018	Deepak Kumar K	Doll	Duft	Duff	Buf
19.	411521104019	Deepan M	Dapan	Den.	Dour	Dock
20.	411521104020	Deepan Chakkaravarthi K	RI	SIL	D.	Pa
21.	411521104021	Devakumari S	Denman	Danmon	Dominario	Derg lem
22.	411521104022	Devatharshini B	Who !	000	3/	Sir
23.	411521104023	Dhanush V	O. Duet	O. Dueg	6 Dug	9. Just
24.	411521104024	Dhanush Vel Nidhi M	QC.	Dr.	Di	av-
25.	411521104025	Dharani T	Ilhini,	Dhin.	Dho	Dhour
26.	411521104026	Dinesh V	Du	VDh	VDA.	Deli
27.	411521104027	Dinesh Chaudhary D	Dinesh	Dina	Ding	Diner
28.	411521104028	Dinesh Kumar L	that	Phu	PI	D
29.	411521104029	Dinesh Kumar M	H.DB	H. DA	H.D.	M. D.S.
30.	411521104030	Dinesh Kumar S	Dunden	Dent	Dush	Duch
31.	411521104031	Divya S	osh.s	Als	280	25Ps
32.	411521104032	Elakiya K	El aleigo	Flaleign	4 Elcelei	e Elcoleiy
33.	411521104033	Elakya R	Elwey	of globes	السالع م	al Salar
34.	411521104034	Franklin Joshwa S	Long.	Trod.	Eng.	8 mg
35.	411521104035	Gayathri B	Cont	w out	00	h orus
36.	411521104036	Gokul D	Copul	Gobals	(nobul.	Gobul.
37.	411521104037	Gokul R	Broke	RILL	Ball	Gold

38.	411521104038	Gowsalya D	Guli	Eul P	Gullet	Campe
39.	411521104039	Guberan T	ou beran?	Guberan T	Guberan-T	bius oran.7
40.	411521104040	Hari Krishnan U	W. V	1000	v. La	S.
41.	411521104041	Harini M	Danni.	Having	Honing	Honing
42.	411521104042	Harish S	Houshs	Horush's	Horish	Horrish
43.	411521104044	Ishasri P	Ishasvip		,,,,,,,	Khasyi.P
44.	411521104045	Jagan M	Egan M	Jagan A	Tagent	Jaga.
45.	411521104046	Jana R	- mai	Pura	Joires	Jar
46.	411521104047	Jeffrin Nelson J	Jun 7	Fren Mes	Juney	Fundad
47.	411521104048	Jitto M	of a		A.	3
48.	411521104050	Jogan Roy K	dody)	Legar	Lgn	Jog
49.	411521104051	Karthi S	Jan	Pathi.	Day	Col.
50.	411521104052	Karthika E	Loth	female	first	Roch
51.	411521104053	Karthikeyan N	Karfle	Karfr	hard	horas
52.	411521104054	Kavitha S	torles	tarfs-	tomes	tal. 8
53.	411521104055	Kavitha V	Komplan	Kample.v	Kanp.	Agunf
54.	411521104056	Keerthika M	w Teerthical	w Coerthina	N. Keeritom	toenhi ba
55.	411521104057	Keerthivasan S	Luston	Dufu	Jul	Alle
56.	411521104058	Kowsalya B	Knusaly	kongraf	kondy	kurly
57.	411521104059	Lakshmi Priya M	lugar	Lackengu M	Derbuige	lazment
58.	411521104060	Lavanya B	2 mya 8	Laune	Janes D	2 market
59.	411521104301	Anitha M	Aritha	Initha	Antha	Anith

60.	411521104302	Arun	Arun	Avun	Soun	Arun
61.	411521104303	Baskar C	Baskar	Baskon	Baskan	Bosto
62.	411521104304	Christoper Daniel	Qual		Jun	M
63.	411521104305	Dhivakar M	Dund	The	Imn	Dha
64.	411521104306	Harish P	18 ment	Band	1 Loub	Breh
65.	411521104309	MadanKishore	with	Noh	pro	not
66.	411521104311	Pradeep Raj	DORAG	Dutt	aged	Put
67.	411521104312	Praveen V	Per	Donn	Daypen	Buen
68.	411521104701	Mohamed sirajuddin	who	Mil	Munh	Am
69.	411521104061	Lavanya P	a mp	Ring.P	Rif	Rip
70.	411521104063	Little Jacob P	title & auto	Littlerest	title	Littlep
71.	411521104064	Madhumitha S	8. Madh	8 Made	8 Moedly	& Madlin
72.	411521104065	Mageswari D.	D.Rod	Dans	Mari	8 Pri
73.	411521104066	Maha Lakshmi M	Ilah.	alas.	Ilah.	Ool,
74.	411521104067	Maluni B	Maluf 8	HalluriyeB	MaluniB	Naturi B
75.	411521104068	Mariya Joshwa S	November	Chart	Now	Jane
76.	411521104069	Meenatshigunavathi R	A, Was	R. B	R. 188	RILE
77.	411521104070	Mohammmed Abdul Rahim P	A	A.	A.	41
78.	411521104071	Mohan Raj M	reheres	Markey	Notal	workow
79.	411521104072	Mohan Raji S.	s.Mely	3.Mohy	SMON	such
80.	411521104074	Navya Vijayan *	May	Nouly	h Now	Now
81.	411521104075	Nimmi Hassan P	J. Dihofa	J. Dily	4.10th	J. 10 chap

82.	411521104076	Nitish Kumar S	Noth Natur Notes
83.	411521104077	Nivedya V.	Lived V Vived V Vived V
84.	411521104078	Nivetha R	Dy Duy Diy Dig
85.	411521104080	Pavithra U	Pay Pay Pay Pay
86.	411521104081	Pooja B.	Pooja. 8 Poõja. 8 Poosa. 8 Poosa. 8
87.	411521104082	Poojasree A	1205+ Q18-9 Q18-9
88.	411521104083	Pradeep Kumar M.	Mysser Mysser MOSE Moser
89.	411521104061	Lavanya P	Rip Rip Rip Rip
90.	411521104063	Little Jacob P	Dosphan D. Sal D. I. Jan
91.	411521104064	Madhumitha S	S. Madh S. Madh S. Madh
92.	411521104065	Mageswari D.	Dei per over of
93.	411521104066	Maha Lakshmi M	Ilah Ilah Ilah Ilah
94.	411521104067	Maluni B	Maluni & Maluni B Maluni B Maluni B
95.	411521104068	Mariya Joshwa S	S.M. S.M. S. P. S. C. P. S.
96.	411521104069	Meenatshigunavathi R	R.W. R.W. R.W. R.W.
97.	411521104070	Mohammmed Abdul Rahim P	A A D A
98.	411521104071	Mohan Raj M	Mitte Mitter M. Mitter M. Mitter
99.	411521104072	Mohan Raji S.	Hohear Hohear Hohear Hohear
100.	411521104074	Navya Vijayan *	Mary Nau Man
101.	411521104075	Nimmi Hassan P	J.10-hele J.10-lefe J.10-lefe J.10-lefe
102.	411521104076	Nitish Kumar S	SNAW SAA SAA SAKU
103.	411521104077	Nivedya V.	Nivertal Nivertal Nivertal Nivertal

104.	411521104080	Pavithra U	
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105.	411521104081	Pooja B.	Bris. Bris Bris Bris
106.	411521104082	Poojasree A	Dies Dense Dies Dense
107.	411521104083	Pradeep Kumar M.	AR MR. AND L
108.	411521104084	Priya M	The Die Die
109.	411521104085	Priyadharshini R	R.R.A. R.R.A. R.R.A. R.R.A.
110.	411521104086	Pugazhendhi J	Quist Conglerially 5
111.	411521104087	Pushparaj E	PLIE Ruhiz Prizi & PENB
112.	411521104088	Rahul A.D	Ponte Redo Res Resto
113.	411521104080	Pavithra U	pay v pay Pay pay v
114.	411521104081	Pooja B.	PosaB PossaB PosaB PossaB
115.	411521104082	Poojasree A	Quality Dyns Dyns Dyns
116.	411521104083	Pradeep Kumar M.	Prong. Daket Deley. Parkey
117.	411521104084	Priya M	Ra.M Cig. M Riga. M Riga.
118.	411521104085	Priyadharshini R	RRA R.RA R.RA R.RA
119.	411521104086	Pugazhendhi J	Our J. Cours Miss Onis
120.	411521104087	Pushparaj E	pulpaj. paras E De ., por
121.	411521104088	Rahul A.D	Palmi Palmi Rahar Rahah.
122.	411521104080	Pavithra U	partu Pariu pariu Para)
123.	411521104081	Pooja B.	pojas Poojas poojas Poojas
124.	411521104082	Poojasree A	p. 84 0.84 p. 64

Co-ordinator

PERI INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennai 600048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE: 24 08 2020

Name of the Student: luberan. T Register No: 411524104039 Year/Semester Course Code: CSA014

Course Name: Astificial Intelligence and Data science.

1. What is your assessment of the course material?

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











(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 wyear 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











(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

DR.R.PALSON KENNEDY

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PERI ITITUTE OF TECHNOLOGY

DR.B.EZHILAVAN

FOUNDER & CEO
VEI TECHNOLOGIES
PVT LIMITED



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

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

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
		Module 1: Introduction to Artificial Intelligence
DATE: 25/03/2023	FN & AN	Introduction to AI-Intelligent Agents: Types of agents, problems solving approaches (search algorithms, game playing)-Knowledge Representation and Reasoning-Machine Learning Fundamentals.
TO 30/3/2023		Module 2: Advanced Machine Learning
	FN & AN	Deep Learning-Introduction to artificial neural networks, applications in image recognition and natural language processingEnsemble.
VENUE:		Module 3: Methods to Advanced Machine Learning
CONFERENCE HALL	FN & AN	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 developmentComputer Vision: Image processing, object recognition, applications in robotics
		Module 5: Applications and Ethics of AI
	FN & AN	Applications of AI in various domains (e.g., healthcare, finance, marketing)Ethical Considerations in AI: Bias, fairness, transparency, and societal impact.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

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

SN o.	Register Number	Name of the Student
1.	41152210400	O7 AYESHA K
2.	41152210400	08 BALAMURUGAN C
3.	41152210400	9 BASHINI M
4.	41152210401	0 BHARATH E
5.	41152210401	BHARATHI P
6.	411522104012	2 BHUVANA K
7.	411522104013	BRINDHA G
8.	411522104014	CHINNASAMY S
9.	411522104015	DEVASURYA S
10.	411522104017	DHASVANTH KUMAR B F
11.	411522104018	DHINESH M
12.	411522104019	DINESH KUMAR K
13.	411522104020	DINESH RAM S
4.	411522104021	DIVAKAR K
5.	411522104022	DIVYA M
6.	411522104023	DIVYA DHARSHINI A
7.	411522104024	ESHWANTH B
3.	411522104025	EZHILMOZHI M S

Lossford

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
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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

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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
28.	411522104103	SIBHI D.

Co-ordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 660 048



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

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

SN o.	Register Number	ce Report for Artificial Int	25.03.23	27.03.23	28.03.23		T
1.	411522104007	AYESHA K	Ayeshar			29.03.23	30.03.23
2.	411522104008	BALAMURUGAN C	De la	Ageshar	gerhur	Lyesha"	Agesta !
3.	411522104009	BASHINI M	Seel 1	Ball	Bata	Bala	Bader
4.	411522104010	BHARATH E	Mash	Albarh	Mach	Mach	Mari
5.	411522104011	BHARATHI P	E. Bhasath	E'Bhasath	E. Bhasath	EBharata	E. Bharat
6.	411522104012	BHUVANA K	P.B.	P.B.	P.82	PBL	p.Bh
7.	411522104013	BRINDHA G	K.Bhum-	KiBhun ,	K. Bhim	K:Bhin	K. Bhu
8.	411522104014	CHINNASAMY S	GJB	4.5	G.B	G.B	G.B
).	411522104015	DEVASURYA S	15. Chin	S. Chu.	S. chi	Sichin.	C. Chr
0.	411522104017	DHASVANTH KUMAR B R	Ter C	peras	Peras	Par	evas
1.	411522104018	DHINESH M	Bra	200	BILL	BRA	BEP
2.	411522104019	DINESH KUMAR K	M.Dh	MIT	MDh	M. M.	M.Bh
3.	411522104020	DINESH RAM S	150	4		Ö	
1.	411522104021	DIVAKAR K	Smy		3/	Sur	Share I was
	411522104022	DIVYA M	Den &	Dens	Ling	Du,	Du
	411522104023	DIVYA DHARSHINI A	DixyaM I	Divya A 7	DiyyaM -	Dixyon"	Disha. N
	411522104024	ESHWANTH B		1	W A	DI A	P
	411522104025	EZHILMOZHI M S	BUNG	3. EMP	END	Che I	Est

19.	411522104026	GIRIDHARAN M	Ghoo. w	Very	Birry	Circle	Carri
20.	411522104027	GOBI SUNDAR R	Gobier	A Tobi Burday	Esob Buda	GOBIGNA	Cobianda
21.	411522104028	GOKUL G	Golula	Bhulh	2, Shully	Solvey	Chull
22.	411522104029	GOKULRAJ A	Alex	Alan	Alen	Ale	AP
23.	411522104030	HARINI PRIYA S	8Pp	KAN	S. P.	MAD (Ro.
24.	411522104033	HARISRI R	Hasis 2	Heroisa, h	Sporcar K	Harieri h	Hasini (
25.	411522104034	HARSHA S G	S.G. #	SG.H	3GH	SaH	SaH
26.	411522104035	JAGANTHAN P	Java	Tarif	Toma	zana	fare
27.	411522104036	JANA PRIYANKA P	The	CAL.	A	AC	JAP
28.	411522104037	JAYASHREE M	M. Jazz	Mi Tay-	M. Tay	M. Tay.	Mila
29.	411522104007	AYESHA K	Ageste	Lache	Ayahe	Lachy	Lun
30.	411522104008	BALAMURUGAN C	Rolan	Palvace	Balm	Raln	Ralen
31.	411522104009	BASHINI M	Bosti. M	Bashi. M	Badi.M	BashiM	Blashin
32.	411522104010	BHARATH E	E. bhasaithe	E.Bharath	EBharath	E. Bhavath	E. Bhavath
33.	411522104011	BHARATHI P	Blook P	Broka P	Blanch	Barah	p) aathip
34.	411522104012	BHUVANA K	Phercina	Bhward)	Bhuvang	Bhuvang	Bhurana/K
35.	411522104013	BRINDHA G	Biolo 6	Bride	poidha.	Bridha	gri dha
36.	411522104014	CHINNASAMY S	6 Chitray	3. Chizany	5. Chinno	3. Chinns	5. Chinney
37.	411522104015	DEVASURYA S	& peracura	1/2 dowasus yo	S. dellessy	5. devosu	sdewsonya
38.	411522104040	JENIFER B	* printers	Tenifas	Ignifel, S	prifes	Jeni Fas
39.	411522104041	JESHEEBA FATHIMA M	M. Tesha	M-Jeshae	M. Isharba	M. Esheeb	M. Jesheda
40.	411522104042	JOTHIKA S	Johiko,s	25Thiko.s	Joth Key	Jothikas	JoThiko-J
11.	411522104043	JOYCE DEVA KIRUBAI A	DKE.X	JOYCE. X	JOYCE.A		JOYCE . A
12.	411522104044	KALAIMARAN	Va Daimera	Kalinarar			Kolaimeran
13.	411522104045	KALAIVANI S	vdal.5	Kokins	4dais	Kalans	Laki J.

44.	411522104046	KALPANA SRI E	Exa S	EKOLS	EXD ST	E. Kalsri	E Kalst
45.	411522104047	KARAN RAJ S	3.1406	- SKan	5 Karg	5. Karg	
46.	411522104049	KAVYA J	Faves	yavga.	Kauya =	J Kauxa.) Kav ya
47.	411522104050	KAVYA S	Clare	s kowa.s	LAY 79 =	Kaxyas	s Kavya.
48.	411522104051	KAWIN V B	(Awin)	e Kerdio.X	B your in !!	B Kalviny.	B (Callin)
49.	411522104054	KRISHNAN S	6-Krishm	of thrichro	Slavisho	Kriehne	ing Krish no
50.	411522104055	LAVANYA M	wayan	haugnya. X	Lavanya.	Lacaryon	Lagunya . Y
51.	411522104056	LITHESH T.S	WY S	- West	sult!	T ILL	is plant
52.	411522104057	LOGESH M	Langham	Loges hit	Logar M	Joseph P	Logah-
53.	411522104058	LOGESH KUMAR C N	(.N 49a)	H C.N. logo	4		ah Civiloy
54.	411522104060	MADHUMITHA M	MADAY	MAPAU.	MADAU	MAIDHY	MADIO
55.	411522104061	MADHUMITHA S	5.radh	1 b. Madh	Smadhe	5. Mach	5. Madi
56.	411522104062	MOHAMEED IDRIS M	M. M. Toi	M.m.idri		Y-midry	
57.	411522104064	MONISHA P	Propriet	P. morist	P. maris	P. monie	P. monis
58.	411522104065	MONISHA S.S	Desonish-J.	Monillaa	Monisha	Monitha	11
59.	411522104040	JENIFER B		Jenifa.B	Jenifa, B	Jerifer.R	2,5
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62.	411522104043	JOYCE DEVA KIRUBAI A	JOXEG-A		JOYLEA		JOYCE-A
63.	411522104044	KALAIMARAN				Kabiman	
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57.	411522104049	KAVYA J	Jenya	70	J. Kaoya	J. Kay 40	7, Kaoya
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69.	411522104051	KAWIN V B	V. B. K. V. B. K. V. B. K. V. B. K.	J.B.P.
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55.7 Co-ordinator

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 COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

DATE:

28/03/2027

Name of the Student: Bashini . M

Register No:

411522104009

Year/Semester 2nd/ 4th

Course Name: Attiticial interliquent

1. What is your assessment of the course material?

The Americant of the Course material very moterell

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

choor content deliwood

3. Rate the overall quality of the program.

(tive liters)

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

Yes

5. Suggestions for enhancement, if any:

No. Suggestion.

Signature of the Student

Reaklining



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

PRINCIPAL

www.peri.education

PERI Knowledge Park, Mannivakkam, Chennal - 600048



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. Duiga . S	
ofYear, Computer Science and Engineering, PERI Institute of Technology has	č
completed an add on course in Workshop on Artificial I	
completed an add on course in Workshop on Artificial Intelligence held from 25 TH MAR 2023 to 30 TH	I

PRINCIPAL

COURSE COORDINATOR

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

Co-ordinator

Head of the Department

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

Copy To:

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

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 Professor, 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

DD/ECE PRINCIPAL

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048.

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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 1: 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

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	1 st -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
	11.02.22	1 St 1	automation ethical issues.
2	11.03.23	1 st -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	1 st -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	1 st -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	1 st -6th	End -Effector-common types and design case study. 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
6	08.04.23	1 st -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

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

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	ABSENT			NLC	NIL	ML	IVIL	NIL

Dr. R. PALSON KENNEDY, M.E., Ph.D., **PRINCIPAL**

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048.

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: DINESH . V	Register No: 4115 19 106005
Year: \V	Date of Feedback: 08 04 2023
Course Name: ROBOTICS AND ITS APPLICATION	V
1. How do you value the course content? The course that explains the	ne way. Robotics build
in Future.	
2. How would you understand the content delivery by the instruction the content, the instructor exp	plained is understand
clearly, the way he explain it pract	ically is so knowledgeable
3. Write the overall quality of the program	
By my side of feedback of quality 100%. 4. Will you recommend this program to your friends/juniors/senions.	
Yes, I recommend this progen	am to my friends
Suggestions to improve, if any:	
Nil	

Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: velon . S	Register No: 411519106027
Year: IV	Date of Feedback: 8 4 2023
Course Name: Robotics and Sts og	
1. How do you value the course content?	
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2. How would you understand the content delivery by th	
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3. Write the overall quality of the program	
ond its experience	moept about 9030 tig
4. Will you recommend this program to your friends/junio	ors/seniors?
Yes, I se Commend th.	is program to my
Fasends.	
Suggestions to improve, if any:	
NO	
	Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Shalini . D	Register No: 411519106024
Year: Year:	Date of Feedback: 8 4 2023
Course Name: Robotics and its of	plication
1. How do you value the course content? The value of course	
3. Write the overall quality of the program According to me it	by the instructor, by the instructor, by the instructor, burly understand four trade is are used:
4. Will you recommend this program to your friends/junion yes, I will recommend the my friends. Suggestions to improve, if any:	
→	Shalini. D

Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Kavi Psiya, M Register No: 4115 19106010
Year: \overline{N} Date of Feedback: $08 - 04 - 23$
Course Name: Robotics & it's application
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3. Write the overall quality of the program
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The Quality of the program The Quality of the psuggeam is, in this generation mostly used and also used future 4. Will you recommend this program to your friends/juniors/seniors? Scope
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Not yet clearly I
M. Kowi Poliya
under Stand and Signature of the Student

easy to leaven.

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 contr	olled?
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
Dynamies
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







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ROBOTICS AND ITS APPLICATION"

CERTIFICATE OF PARTICIPATION

	This is	s to certify that Mr / Ms.	KAVIYA	E.S
of	Final	Year, Electronics and Com	munication Eng	ineering, PERI Institute
of Techn	nology has	completed an add on course	in ROBOTICS A	ND ITS APPLICATION
held from		2023 to 08.04.2023.	h /	

PRINCIPAL







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ROBOTICS AND ITS APPLICATION"

CERTIFICATE OF PARTICIPATION

	This is	to certify that Mr / Ms	PRAVEEN	RAJ T	•
of	r 1	Year, Electronics and C			
of Tec	hnology has	completed an add on cou	rse in ROBOTICS	AND ITS A	PPLICATION
held f	rom <u>25.02.2</u>	1023 to 08-04.2023.			
	Portago	Barl			

COURSE COORDINATOR

PRINCIPAL







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Organizes

ADD ON COURSE IN

"ROBOTICS AND ITS APPLICATION"

CERTIFICATE OF PARTICIPATION

	This i	s to certify that Mr / Ms	SHALINI.	D	
of	Final	Year, Electronics and Con	nmunication Engi	ineering, PE	RI Institute
of Te	chnology has	completed an add on course	in ROBOTICS A	ND ITS APP	LICATION
held	from <u>25.02</u> .	2023 to 08.04.2023.			
	Dh	2 . 0/	h		

PRINCIPAL

COURSE COORDINATOR

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

Co-ordinator

Head of the Department

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

Copy To:

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

Mannivakkam, Chennai 600048

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
PED INSTITUTE OF TECHNOLOGY

Mannivakkam, Chennal - 600 000

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

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	1 st -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	1 st -6th	Utility packages, Introduction to Collection- Hierarchy of collection framework-Generics-Array List, LL, Hashset, Treeset, Hash Map-comparators-Java annotations-Premain method.				
3	18.03.2023	1 st -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	1 st -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	1 st -6th	Java jar Files-Introspection-Garbage collection Architecture and design-GC Cleanup process, Invokin 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-Advance	d Java	Programmir	ıg

		Atten	uance Kepe	Teran	cea ou va z	1081	
S.NO	REG. NO.	NAME OF THE STUDENT	25.02.23	11.03.23		25.03.23	01.04.23
1	411520106001	M. ABINAYA	thingan		there	theyan	theyan.
2	411520106002	P ARAVINTH SANKAR	Francol	Pixtrame	Photos	Brank	FX CO
3	411520106003	K. ARULMANI	Proceden	Autran	AMULYMY	ARM MAN	ARCHAN
4	411520106004	R. ARUNRAJ	p. Out	Rilly	KIDE	P. Rus	bour.
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23	411520106025	N KARTHIK	Nous	Nikat	N. Kasz	Kasts	N. Kow
24	411520106026	A. KAVIYA	A Kaviya	Akaviya	Akaviya	AKaviya	Akavisa
25	411520106027	A. MANIKANDAN	A.Ma	ACS	ABS	Am	Am
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55	411520106701	A SIVAPRAKASH	
		RESENT	
		ABSENT	

Co-ordinator

HOD/ECE

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

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Ahinaya . M Register No: 41152010600
Year: 117 Date of Feedback 1/4 23
Course Name: Advanted Java Programming
1. How do you value the course content?
Most important in Comeration
2. How would you understand the content delivery by the instructor?
Easy its understand
3. Write the overall quality of the program
Grend Content s nine Clauses
4. Will you recommend this program to your friends/juniors/seniors?
Yes. I'm remmonded Sen Friends
Suggestions to improve, if any:
Grood. Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Solinivasan V	Register No: 411520106041
Vagre	Date of Feedback: 01/01/2023
Course Name: Advanced Java praggame	ing
1. How do you value the course content?	
this course of cont	ont us more valuable to
Luture	
2. How would you understand the content delivery by the is the Prestoric too deleve	instructor?
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.	rd the preogram to all
Suggestions to improve, if any:	
No Nuggestfon. It	8 all ofood
	Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Sarayana kuman. A	Register No: 411520106305
Year: 3rd	Date of Feedback: 1 4 23
Course Name: Advanced TAVA 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?

Jes. I will recommend this program my friends and jurious

Suggestions to improve, if any:

No suggestions. It's all good.

Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: 60 mathi. N Register No: 411520106015					
Year: The Date of Feedback: 01/4/23					
Course Name: Advanced Java Programming					
1. How do you value the course content?					
Most important in Current Genustion	b				
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 Clares					
4. Will you recommend this program to your friends/juniors/seniors?					
Yes, I'm recommend my priends					
Suggestions to improve,if any:					
Much Good.					
Signature of the Student					

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: 5 \ 5 1 2 2 2	Register No: 411520106029
Name of the Student: Naven. P	Date of Feedback: 01 04 2023
Year: III 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 instru	
It is easy to unders!	tart
3. Write the overall quality of the program	
quality of the program	is Grood.
4. Will you recommend this program to your friends/juniors/senions	ors?
Yes	
Suggestions to improve, if any: Nill	
	aven

Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASSESSMENT ON ADVANCES JAVA PROGRAMMING

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
- & 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
- 2. 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
- 2. 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
- Q. 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
- Q. 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
- e. 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
- L. 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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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

Co-ordinator

Head of the Department

Copy To:

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

Head of the Department
ELECTRONICS AND COMMUNICATION ENGINEERING
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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
PEDI INSTITUTE OF TECHNOLOGY

he mavakkam, Chennai - 600 0+8,

Manniyakkam, 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.

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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

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-ARI 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 WE Keys-Sniffing Traffic Wireless DOS Attacks-WLAN Scanners-WLAN Sniffers-Hacking Tools-Securin Wireless Network.

Coordinator

HOD/ECE

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

		/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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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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411521106054	SUDHARSHAN K
411521106055	SUJITHA S
411521106056	SWETHA R.
411521106057	SWETHA T.
411521106059	THIRUPATHY G
411521106060	VIJAYA SRI Y.
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Attendance Report-Ethical Hacking							
CNO	REG. NO.	NAME OF THE STUDENT	04.03.23	08.04.23	29.04.23	06.05.23	13.05.23
S.NO	411521106001	AISHWARYA I	AND I	Aisher		History.I	DISPAR I
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Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PERI INSTITUTE OF TECHNOLOGY
Mannivakkam, Chennai - 600 048

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: Aur wash . 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?

Yeas, 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:

Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING FEEDBACK FORM-

ACADEMIC YEAR 2022-2023

Name of the Student:	Agravind. Y	Register No:	006
Year: U		Date of Feedback:	13/05/2023

Course Name: Ethical Lacking

1. How do you value the course content?

It is very useful Boon the Britishe.

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

the instanctor has delivered the content very clearly and explainable.

3. Write the overall quality of the program

the quality of the perogeram is very good.

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

I will recommend this my foriends and junious Suggestions to improve, if any:

It's all good

Agrantic 1/13 los Signature of the Student

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

FEEDBACK FORM-

ACADEMIC YEAR 2022-2023

Name of the Student:	A	•	Indh	ru	a
_				U	l)

Register No: 4115 21106020

Year: 11

Date of Feedback: 13 05 2023

Course Name: Ethical hacking

1. How do you value the course content?

It 9s very usefull since it is edge-culting technology.

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

It 9s 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:

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING FEEDBACK FORM-

ACADEMIC YEAR 2022-2023

Name of the Student: M. Kanagavel Year: Link II Course Name: Ethical hacking	Register No: All \$ 2106023 Date of Feedback: 13 / 05/2023
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 ins The Instructor has delivery the understand way.	tructor? The delius easy to
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/so yes, I will recommend This Because its very useful Suggestions to improve, if any:	N
	Signature of the Student

Avinosh. S Second year ECE

PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASSESSMENT 1 ON ETHICAL HACKING

- 1. What is the primary goal of ethical hacking?
 - a) To cause damage and disrupt systems
 - b) To gain unauthorized access to systems
- To identify and fix security vulnerabilities
- d) To steal sensitive information
- 2. Which of the following is an example of passive reconnaissance in ethical hacking?
 - a) SQL injection
- N 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
 - by 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

b to

5. W	hich of the following is NOT a phase of the ethical hacking process?
a) I	Pootprinting and reconnaissance
b) (Scanning
N	Exploitation
d) l	Destroying data
	security researcher discovers a critical vulnerability in a popular web ication. What is the best course of action?
a)	Exploit the vulnerability to raise awareness
b)	Disclose the vulnerability responsibly to the vendor
- 57	Sell the vulnerability on the dark web for profit
d)	Keep the vulnerability a secret to maintain an advantage
	hich of the following password-cracking techniques tries all possible racter combinations to guess a password?
a)	Brute-force attack
44	Dictionary attack
c)	Rainbow table attack
d)	Phishing attack
8. W	hat 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. V	which of the following is an example of a social engineering attack?
a)	Cross-site scripting (XSS)
b)	Distributed Denial of Service (DDoS)
8	SQL injection
d)	Tailgating into a secure building

10. Which protocol is commonly used for secure remote login and file transfer
a) HTTP
b) ETP
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
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
by 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 2. What service is likely running on that port?
A) HITTP
b) FTP
c) SSH
d) SMTP
14. Which phase of the ethical hacking process involves gathering information about the target system?
a) Enumeration
by 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 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 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
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
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
e) 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
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

Packet sniffing





Organizes

ADD ON COURSE IN

"ETHICAL HACKING"

CERTIFICATE OF PARTICIPATION

Thi	s is to certify that Mr / Ms	AVINASH . S	
of Second	Year, Electronics and Comr	munication Engineering	, PERI Institute
of Technology	nas completed an add on cours	e in ETHICAL HACKI	NG held at held
from <u>04.03</u> .	2023 to 13.05.2023		

PRINCIPAL

COURSE COORDINATOR

www.peri.education

PERI Knowledge Park, Mannivakkam, Chennai - 600048





Organizes

ADD ON COURSE IN

"ETHICAL HACKING"

CERTIFICATE OF PARTICIPATION

	This is to certify tha	t Mr / Ms	SUJITHA. S	
of _	Second Year, Electro	nics and Com	munication Engineering	g, PERI Institute
	hnology has completed ar		e in ETHICAL HACKI	NG held at held
from .	04. 03·2023 to 13			

PRINCIPAL

COURSE COORDINATOR





Organizes

ADD ON COURSE IN

"ETHICAL HACKING"

CERTIFICATE OF PARTICIPATION

	This is to certify that Mr / Ms.	SUDHAM. M	
of	Second Year, Electronics and Com	munication Engineering, PE	RI Institute
of T	Technology has completed an add on course	e in ETHICAL HACKING h	eld at held
fron	om 04.03.2023 to 13.05.2023		

PRINCIPAL

COURSE COORDINATOR

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/FFF

Copy To:

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

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

HODELLE

PRINCIPAL.

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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/REE

Manniyakkam, 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

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	

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	

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

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR 2022-2023

Attendance

Course Code: EA011

Course Name: Embedded C

	Register				Date		
S. No	Number	Name of the Student	26.04.2022	27.04.2022	28.04.2022	29.04.2022	02.05.2022
			II - E	EE			
1.	411521105001	Ashish J	Ashishit	Ashish J	Ashishot	Aghield	Herry -J
2.	411521105002	Bubesh S	Bulah	Bulgh	Bulesh	Bulesh	Buch
3.	411521105004	Divya R	Dryn &	PASCR	Dryik	Deser	Peyair
4.	411521105006	Kamalavendhan S	J. Kenry	g. Kny	& Kung	S. Vine	& Kay
5.	411521105007	Kaviya M	Marie	Kynn	there	1	Marie Contraction of the Contrac
6.	411521105008	Keerthika V	Mary 1.	Morrow	Skir	Service .	Secret 1
7.	411521105009	Likhitha J	later	bottler	booting	tru 8	120
8.	411521105011	Murali S	mylle	by le	malle	rush	mon
9.	411521105012	Nikitha N	N	Num	non	Nove	Nicha
10.	411521105013	Nisha B	Nishe	Nisha	Nishe	Nisha	
11.	411521105015	Pothigachalam U	Pott	Pothy	- Both of	Pothy	Poth
12.	411521105017	Priyanka M	Poriyanka	Payanta	Poreganka	priganka	Porcyanto
13.	411521105018	Sabitha S	Sabitha	Sabitha	Sabitha	Salsitha	Sabitha
14.	411521105019	Samy K	Samy	Sanger	Sang K	Samy	Samyk
15.	411521105020	Saravanan K	Barawarank	Garavanank	Baracanan k	Sara varianik	
16.	411521105021	Shasidharan K	Chant	shot	Sharf	Sur	Ship

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18.	411521105023	Thivya S	Marin	Marile	James	- Maria	Maray.
19.	411521105024	Varunraj G	1/1	Vm	Vm.	Vory	When !
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21.	411521105301	Balaji E	Cart	Flore	Gland	(of and	(start
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23.	411521105303	Illayabharathi E	d d	1 12	V n	Jaj gankor)	Tai garler D.
24.	411521105304	JaiSankar D	Jensto	1 som	July.	harry h	Janua .
25.	411521105305	Kamaraj K	Komoni	le h	hand	herm	penson
26.	411521105306	Karthik Priya kumar D	home	Marsin		Nagariun	Nagarjun.
27.	411521105307	Nagarjun S	Nagazium	Nagaryun	Nagarin		Nagarjun . Naven. N
28.	411521105308	Naveen N	Acideer N	Naver N	Naveen N	Naveen N	Naucento
29.	411521105309	Rohit A	Rehita	Routet	Roughit	Merest	0 1
30.	411521105310	Rupesh P	alart	Lara	2 w n	Part	Quet
31.	411521105311	Sandhanakrishnan B	Sam	Son	San	- San	Sam
32.	411521105312	Sethuraman A	Sether A	Sothlea	Setru.	Sother.A	50tha.A
			III - F				00000
1.	411520105001	Arunachalam R L	Atan PL	Pour. RL	ATUNDE	roune	A ounily
2.	411520105003	Chandru S	Chun S	chn s	ch:s	ch	-C-''
3.	411520105004	Janarthanan K	Jan	Jan	Sa	Dan	San
4.	411520105005	Jayanth D	(5),1)	(1)-17	(1)	(1)	11012
5.	411520105006	Keerthana V	K Och	Kao	Kolin	Ka	ROO
6.	411520105007	Krishnakumar R	Kelleh	kellsh	Relish	Kolleh	Kutsh
7.	411520105008	Nitheesh A	Numbt A	Nam A	Nima	Nuntia	Nm A
8.	411520105009	Pavithra C	Rounc	Ralica	Pavi-c	Pavic	Pavica
9.	411520105010	Poovarasan A	Rous A	Pr. A	Pu. A	D. 0	M.A
10.	411520105011	Praveenkumar A	Praventeuma A	Proveed Cumar A	Growan Kuman . A	T. R	Praveed Remot A
11.	411520105012	Rajkumar R	Raj P	Raj-R	Raj.R	Ray . R	Ray+R
12.	411520105013	Ramya S	2n-5	R S	Rom .S	Rm. S	R.S
13.	411520105014	Saravanan E	Saravanana	SavaranE	Sadavaran	= Sabava	Sa Ca vant
14.	411520105015	Sivaramakrishnan R	S	-5-	-5-	5	- 5
15.	411520105016	Srikanth G	Shilo	ST2: 6	Scri co	STi G	STU CO
16.	411520105017	Vigneshwaran G	Vierzeghanour 4	Vienechwar - 07	vigae showrand	bigreshwaran C	1 Vignestowaran en
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17.	411520105018	Yuvashree M	M. Jelvasn	M, Juva	M. Yan	M. Yuk	Mya
18.	411520105301	Abishek Samuel B	Shruh	Alvet	Shruh	Almil	Auch
19.	411520105302	Anuramabarathi S	Souplun	Julles	Leubler	Sulfue	Saloru.
20.	411520105304	Dinesh Kumar P	1 Lever	. Jews	How	Hum	June
21.	411520105307	Gokul S	crokers	Grokel.s	Grokul-S	Grokul.s	Gokul. J
22.	411520105308	Hariharan S	Harefren	Harefur	Hawhen	Hauch	Souther ,
23.	411520105309	Harish P	Levie	Kui	Shew	Luce	Joenn
24.	411520105310	Harish R	Holla P	Har R	Haff .D	Halling	Harry R
25.	411520105311	Jancy Reena P	Towny,	Stewey	Juny	Janey	Thung
26.	411520105312	Jayanthan S	g. d.		0	4	Le for
27.	411520105313	Kavikumar M	Kasin	Kawi.m	Kan.m	Kan, M	Ka.M
28.	411520105314	Kingslin A	Knight	Muy.	frey	Shugh	Duny.
29.	411520105315	Mariyakalai P	Munim	Murely	Munice	Menen	Muu
30.	411520105316	Mohan R	Mohen. R	Mohun' R	Mohan-R	Mekon. R	Motion . R.
31.	411520105319	Nivetha S	S. Nivetha	of Nivetha	& Nivetha	S. Nivetha	S. Nivetha
32.	411520105320	Poovarasan M	900 mm M	P00	P00-1	1800 m.M	Poom
33.	411520105321	Prasanth K	Dunch	Denete	Diwind.	Dured	Durch
34.	411520105323	Rajesh S	Rajeste S	Rajesti-3	Rajesti's	Rajestis	Rogestes
35.	411520105324	Sarvesh S	Samuel	South	gener	Lower	Somewish.
36.	411520105326	Sowndarya S	Soundlys	Saulsblas	soursage	Soundallas	
37.	411520105327	Sridharan P	Sve	Snur	800	8,000	gu,
38.	411520105328	Srinath K	Squeta	Q te	Sorily	Szikt	· Dring
39.	411520105329	Sumithra S	Junt	mueur	Drugs	okum	France
40.	411520105330	Suresh M	Suffell M	Levesh.m	Sullosh		Seyloh. M
41.	411520105331	Thirsha M	Herry	Thurst	Vanus	There	frem
42.	411520105332	Thomas Richard M	Thomas	THE	TRA	-	The
43.	411520105333	Varshini R	R. Narshin	Ryarthini	R. Vachi	R. Varshin	R. Varshing
44.	411520105334	Velu P	Voler.P	Blev. P	velv.P	Velv. F	Vely. P.
45.	411520105335	Venkatesh M	Show	fluer	Mus	The	There .
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3.	411519105003	Balaji S	Kalaji 'S	Polaji S	Rolayi.s	Bologi 'S	Eday S
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5.	411519105006	Hariharan R	Herh	P. Haulh	R. Haule	R. Hausle	R. Haule
6.	411519105007	Iyappan P	(gaffan P	Goggan. P	lya pan 8	1 gappan P	(by a gran. 8
7.	411519105008	Ponnarasi K	Doman	Danne	Donum	Deeun	Home,
8.	411519105009	Savitha R	saulthal	Savishack	Santhal	Sauthork	Sallshar
9.	411519105010	Surya P	Surya P	Surya: P	Surga P	Survey P	Surgan P.
10.	411519105011	Vinothkumar M	0/4	W.	a ht	W.	
11.	411519105301	Dinesh Kumar V	Structe	Duche	Dench	duche	Skush
12.	411519105303	Prakash V	Prashes M.V	graskash.V	grasboshi V	graskas H. V	grastash.v

Coordinator

HOD/EEE

Mannivakkam, Chennai 600048

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR 2022-2023

Assessment

Course Code: EA011 Course Name: Embedded C

- 1. Embedded system is designed to
 - 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.
 - Reactive & Real Time
- 3. Software written for embedded system is called
 - a) Embedded Software
 - b) System program
 - c) Operating system
 - Program (b)
- 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
 - 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
 - Microcontrollers & microprocessors
- 7. Embedded C is used for?
 - Microcontrollers
 - b) Desktop computers
 - c) Laptops
 - d) Audio system
- 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 /
 - Embedded
 - d) Personal

24 | 25

2/5/23

9.	It is a characteristic provision of some debuggers to stop the execution after each instruction because title() method 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 e) 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? Compiler 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	 a) Security chips b) Memory disk security 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? 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 Modified exclusive shared invalid d) Modified exclusive stale invalid
21. What does ICE stand for? a) In-circuit EPOM b) In-code emulation In-circuit emulation d) In-code EPROM
 Which is the single device capable of providing prototyping support for a range of microcontroller? Umbrella device OTP RAM ROM
23. What does PCM stand for? a) Peculiar Code Modulation b) Pulse Codec Machine 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

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2022-2023

FEEDBACK FORM

Name of the Student: THIVYA - 9	Register No.: 41152110502
Year: I - 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 roy expectations

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

Expectations for student Descripting were Charles

Olehical

3. Write the overall quality of the program

The Overall Quality of the program

was cause some

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

For some of will becomend

Suggestions to improve, if any:

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING **ACADEMIC YEAR 2022-2023**

FEEDBACK FORM

Name of the Stu	ident: ANURAMA	BARATHI.	S	Register No.: 411520105302
Year: 111			Date	of Feedback: 02/05/2023
Course Name:	EMBEDDED	C		

1. How do you value the course content?

The Course Content was vory easy.

July you understand the content delivery by the instructor?

The instructor was very friendly k helping. 2. How would you understand the content delivery by the instructor?

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

PERI INSTITUTE OF TECHNOLOGY <u>DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING</u> ACADEMIC YEAR 2022-2023

FEEDBACK FORM

Name of the Student: ABIMANY 6.3	Register No.: 411519105001
----------------------------------	----------------------------

Year: 1V- FEF Date of Feedback: 02/05/2023

Course Name: EMBE DDED 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

Aur S



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 / M	s. <u> </u>	ya S	
of <u></u>	Year, Electrical and	Electronics Engi	neering, PERI Institute	of Technology has
completed an add	d on course in EMBEI	DDED C held t	from 26/04/2023 to 0 2	2/05/2023.
PRINCIPAL	VICE PRINCIPAL	Faulto HOD	COORDINATOR	

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ADD ON COURSE IN

"EMBEDDED C"

CERTIFICATE

This is	s to certify that -Mr / Ms	s. Anura	mabarathi S	
of II	Year, Electrical and	Electronics Engi	neering, PERI Institut	e of Technology has
completed an add	on course in EMBE [DDED C held f	rom 26/04/2023 to ()2/05/2023.
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PRINCIPAL	VICE PRINCIPAL	HOD	COORDINATOR	

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ADD ON COURSE IN

"EMBEDDED G"

CERTIFICATE

	This is to	o certify that Mr/ Ms . Ahimanyu S
of	īv	Year, Electrical and Electronics Engineering, PERI Institute of Technology has
completed	l an add on	course in EMBEDDED C held from 26/04/2023 to 02/05/2023 .

PRINCIPAL

VICE PRINCIPAL

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COORDINATOR

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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

Copy To:

1. Principal

2. Vice - Principal

3. IQAC

4. Faculty Members

5. Notice Board

Head of the Department

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

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

Agenda Item 3: Assessment method

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

Senior faculty member

Head of the Department

Dr. R. PALSON KENNEDY, M.E., Ph.D. Dept. of Mechanical Engg. PEDI INSTITUTE OF TECHNOLOGY

PERI INSTITUTE OF TECH. am, Ch-600 J48 Manutvakkam, Chennai - 600 048.

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)

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

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	A
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

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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

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

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Course Name: Modeling for Design Engineers

Course Code: MEA007

Year/Semester:	IV/VIII	
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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.,
PRINCIPAL

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048. HOD/MECH

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

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance Sheet

Course Name: Modeling for Design Engineers

Co	ourse Code: M	EA007	Todeling 10	i Design E	O	ar/Semest	er: 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	Muhfumor	Anthonory	Hay James	Tital kuman	Happaran
2	411519114002	A. AKASH	Alack	Doch	Alkah	Alech	Draw
3	411519114003	C ARUN	B		(D)	(A)	A-
4	411519114004	M. FAREED	Ta Deod	A Seed	Darak	Asked	Correct
5	411519114005	K. GANESH KUMAR	Garethur	Coverhan	Ganeth	Barechar	Groverh
6	411519114006	R HARI KRISHNAN	How your	Afore when	Tors who	Havi Nhow	Kydringen
7	411519114007	V MITHRAN	Pulm	Mylva (Prish	Willen	Prilha
8	411519114008	M. MOHAMMED RAZOOL	Monos	rad	1/10/2	Moss	ride
9	411519114009	S. MUGUNTHARAJ	Muger	rok	that	Mus	munt
10	411519114010	M.T. NAVEEN	Nav	Now	Now	27	2
11	411519114011	S NEELAGANDAN	Ne elgowal	Neglas	Neclaen	Neelag	Nedia
12	411519114012	T PRADEEP RAJ	Pars	Pos	Pul	Rg	22
13	411519114013	A. RAJ	Raj	Par	Pad	Ray	Raj
14	411519114015	G SABARI VASAN	Sabal	30	Sas	Sals	Blul
15	411519114016	A SANDEESH KUMAR	800	32	Sch	\$	S

SI. No	Registration Number	Student Name	25.02.23	04.03.23	18.03.23	25.03.23	08.04.23
16	411519114018	V. SATHISH	1.50	V-5=	V-9:	- V.s.	V-8:
17	411519114019	K. SATHISH KUMAR	K. Shith	C. Baskishlet	4. Sathist his	C Sellist And	a Sethight
18	411519114020	S SELVINRAJ	سلع، ی	SSA	8.22	2-20	2. Jal
19	411519114021	V. SIVAKUMAR	V. Strake	V Strak-	givale	gival	V. Strale
20	411519114022	B SURYA NARAYANAN	Brank	B. San	B. Swews	B. Surla	B. Surk Bo
21	411519114023	М ТНАНА МОНАМЕD	Merken	N. Robinson	with him	with	William
22	411519114301	S ABDUL RAJACQ	ABOUL			FIBRUL ROYACO	PADACO
23	411519114302	AJAY MATHEW	Marken	Azay	Azay mother	ATOU	As our matheer
24	411519114303	MATHAN	Wathour	frather.	mather		mather
25	411519114305	S NAGACHARAN	Nagada	S. Maga Charar	S. Nopa chara	S. hose	S. Nagar
26	411519114306	P. SARAVANAKUMAR.	p Sonar	P. Canaval	6 Jagan	P. Sou	P. Sono
27	411519114307	N. SUNIL.) con	2. Suril	Suri	2) Sue	D. Svari
28	411519114308	TAMILARASAN (Joseph	larar	(avidara	Tank on	Jours alex
29	411519114309	VALLARASU	Mosam	Vallaratu	Meson	allerary	Tallara
30	411519114310	SHYAM KUMAR	Qhyank	Chyamber	Shepen	Shypul	Shepma

Coordinator

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

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PERI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

MEA007 Modeling for Design Engineers

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Tyr 14th sem
08/04/23

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DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

nome: A. Roj

MEA007 Modeling for Design Engineers

BORNO: MA 210 11101;

Dure: 08.04.23

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DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

V. sathish

411319714018

Assessment Test

MEA007 Modeling for Design Engineers

08.04.23

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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: 4115/9114308
Year: The Date of Feedback: Ob/4/23
Year: Tylk Date of Feedback: 08/4/23 Course Name: MED Modeling for Design Bylneons
1. How do you value the course content?
The Course content is good and usefu
2. How would you understand the content delivery by the instructor?
Very clearly understand
3. Write the overall quality of the program
Exerchent pregram
4. Will you recommend this program to your friends/juniors/seniors?
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Suggestions to improve, if any:
Dice team work
Signature of the Student
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PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: R. Ray	Register No: 4 11 5191140 3
Year:	Date of Feedback: 07-04-23
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all to comband and	los de color de markosos
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Suggestions to improve, if any:	٥.

Ross Signature of the Student

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: V - SATHISH

Year: I Course Name: Modeling bor Design Engineers	Register No: 4/15/14/14/019 Date of Feedback: 09.04.23
1. How do you value the course content? It was good and very Us	seball
2. How would you understand the content delivery by the instruction of the content delivery by the co	otor? Understand
3. Write the overall quality of the program The overall program was good	
4. Will you recommend this program to your friends/juniors/seniors	s?
Suggestions to improve, if any: will	

V. Signature of the Student



DEPARTMENT OF MECHANICAL ENGINEERING

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ADD ON COURSE IN

"MODELING FOR DESIGN ENGINEERS"

CERTIFICATE

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

of______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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DEPARTMENT OF MECHANICAL ENGINEERING

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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 11 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

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

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

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.

HODAMF

Dr. R. PALSON Head of the Department Dept. of Mechanical Engg PERI INSTITUTE OF TECH Mannivakkam, Ch-600 048. Mu....vekkum, Chennal - bo

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

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

Mannivakkam, Chennai 600048

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 supplyprocessor, 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

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

PERI INSTITUTE OF TECHNOLOGY <u>DEPARTMENT OF MECHANICAL ENGINEERING</u>

TIME TABLE

Course Code: MEA011

Year/Semester: III/VI

Course Name: Small Unmanned Aerial Vehicle-Drones

Session: FN & AN

Sl. No	DATE	HOURS	TODIC
1	25.02.2023	1st-6th	History of Small UAV —classification — Introductio to Small Unmanned Aircraft Systemsmodels an 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

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Head of the Department Dept. of Mechanical Engg. PEPI DISTITUTE OF TECH Mannivakkam, Ch-600 043

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

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6		41152011400	6 MOHAMMED KANNI A
7		41152011400	7 NITHYANANDHAM S
8		411520114008	B PUVIRASAN
9		411520114009	RAJESH G
10		411520114010	RITHWIK E B
11		411520114011	ROOBAN DHARMARAJ K
12	-	411520114012	SANTHOSH KUMAR R
13	4	111520114013	SARANRAJ S
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15	4	11520114015	SRIDHARAN S
16	4	11520114016	SUGADEV V
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29	41152011431	2 JOSHUA A
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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 Dept of Mechanical Engg. PERI INSTITUTE OF TECH. Mannivakkam, Ch-600 048.

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Attendance Sheet

Course Name: Small Unmanned Aerial Vehicle-Drones

Course Code: MEA011

Registration

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Year/Semester: III/VI

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17	411520114017	TAMIL SELVAN C	Sugadov c	og and ev S			Eugedan
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Coordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
PRINCIPAL

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048. нормесн

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

1/4/23

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR 2022-2023

Assessment Test

MEA011 - Small Unmanned Aerial Vehicle-Drones

- 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
- (2) 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
- Ø 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



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

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

A) Internal combustion engine

- 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
- (2) 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
- 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
 D) 5000 feet
- 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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- C) Variable Light Operating System
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- 23. What is the purpose of a gimbal on a drone?
- A) To increase flight speed
- B) To stabilize the camera
- C) To improve battery life
- 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. Tamil Selvan 10017 414/23

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR 2022-2023

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

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- 8. What is the typical power source for small UAVs?
- A) Solar cells
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PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING 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 Stud	ent: Gowtham . k.	Register	No: 41150	20 114004
Course Name:	ent: Gowtham. k. 1 EA 011/small Ur	Date of i	Feedback: 1/1 Aesial	t/23
	Excellent Cont			- Drones
2. How would yo	u understand the content delivery by the	e instructor?	lear.	

3. Write the overall quality of the program

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

yes.

Suggestions to improve, if any:

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Register No: 4115201401 Date of Feedback: 1/4/23 and Alrial Vehicle
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Suggestions to improve, if any:

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING FEEDBACK FORM

ACADEMIC YEAR 2022-2023

	ACADEMIC YEAR 2022-2023
	Name of the Student: A Toshua Register No: 41152011431 Date of Feedback: 1/4/23 Course Name: MEADI / 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.
1	Wen
4	Will you recommend this program to your friends/juniors/seniors?

Suggestions to improve, if any:

Signature of the Student





Organizes

ADD ON COURSE IN

"SMALL UNMANNED AERIAL VEHICLE - DRONES"

CERTIFICATE

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

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VICE PRINCIPAL

HOD

COORDINATOR

www.peri.education



Organizes

ADD ON COURSE IN

"SMALL UNMANNED AERIAL VEHICLE - DRONES"

CERTIFICATE OF PARTICIPATION

	TH	nis is to certify that Mr / Ms. TAMIL SELVAN.C
		Year, Mechanical Engineering, PERI Institute of Technology has completed an add on
course	e in SM	ALL UNMANNED AERIAL VEHICLE - DRONES held from 25/02/2023

to 01/04/2023.

PRINCIPAL

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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.

SI. No	Year	Scheduled Date	Session 1	G	
1	II	04.03.2023-13.05.2023		Session 2	
		04.05.2025-13.05.2023	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

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.

member

Head of the Department of Mechanical Engo

Mannivakkam, Ch-600 048. Mannivakkam, Chennai - 600 0-

Mannivakkam, Chennai 600048

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

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

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Mannivakkam, Chennai 600048

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

нормесн

Head of the Department Dept. of Mechanical Engg.

PERI INSTITUTE OF TECHNOLOGY <u>DEPARTMENT OF MECHANICAL ENGINEERING</u>

TIME TABLE

Course Code: MEA004

Year/Semester: II/IV

Course Name: Modeling Practice for Automotive Assemblies

Session: FN & AN

Sl. No	DATE	HOURS	TODYCO
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

норимесн

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

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

- 1	SI. No	Registration Number	n	Student Name	
	1	41152111400	1	ABINESH L	
	2	2 411521114004		AVINASH A	
	3	411521114005		BHARANIDHARAN D	
	4	41152111400	6	BHARATHKUMAR M	
	5	41152111400	7	BRAGADEESH K	
	5	411521114009)	GOKUL K	
	7	411521114010		GURUDHARSHAN S	
8	3	411521114012		HARISH A	
9		411521114013	1	HARISH M	
10		411521114014	1	JAYAKANTHAN R	
11		411521114015	+	JAYAPRAKASH E	
12	2	411521114016	+	KAVIYARASAN M	
13		411521114018	+	LOKESH B	
14	1	411521114020	+	MUKESH KUMAR P	
15	4	411521114021		'ARAMESH A	
16	4	111521114022	P	RAVEEN S	
17	4	11521114023	P	REMKUMAR P	
18	4	11521114024	RAGUL M		
19	4	11521114025	SANTHOSH KUMAR S		
20	4	11521114026		ARATHKUMAR S	
21	4	11521114027	-	TEPHEN RAJ M	
22	4:	11521114028		JJEETH S.S	
		7			

S. N	o Numbe	er Student Name
23	411521114	4029 SURENDAR N
24	411521114	4030 THAMIZHARASAN
25	411521114	1031 THAMIZHMURASU V
26	4115211140	
27	4115211140	
28	4115211140	035 VIGNESH R
29	4115211140	
30	4115211140	
31	4115211143	
32	41152111430	
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35	41152111430	THE HEALT WILL
36	41152111430	
	41152111430	THE THINK A
37	41132111430	7 KALIL MOHAMED IBRAHIM A
38	411521114308	8 KARTHICK G
39	411521114309	9 KARTHIKEYAN M
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Coordinator

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Head of the Department Dept of Mechanical Engg. PERI INSTITUTE OF TECH. Mannivakkam, Chronic 248.

Mannivakkam, Chennai 600048

DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR 2022-2023

Attendance Sheet

Course Name: Modeling Practice for Automotive Assemblies

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Coordinator

Dr. R. PALSON KENNEDY, M.E., Ph.D.
PRINCIPAL
PER INSTITUTE OF TECHNOLOGY

PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048 новитесн

Head of the Department Dept. of Mechanical Engg. PERI INSTITUTE OF TECH. Mannivakkam, Ch-600 048. 7:30 Prilady

13/5/23

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

	MEA	1004 Modeling	Practice for	Automotive Asse	mblies
	1. Which software	is commonly use	d for CAD me	odeling in the automo	ative industry
	A) AutoCA	D B) Solid	Works	C) MATLAB	
	2. In CAD modeling	g, what does "CA	D" stand for	o op mane Ab	D) Blender
	A) ComputeB) ComputeC) Compute	r-Aided Design r-Assisted Draftin r-Animated Draw Architecture Desi	ng		
3	A) To simulate flu B) To analyze stre C) To optimize fue D) To design aesth	ss and strain	nt analysis (F	EA) in automotive as	ssembly modeling?
4.	Which modeling to A) Finite element a B) Kinematic analy	echnique is communalysis	nonly used for	simulating crash test	ts in automotive design?
	C) Computational f	luid dynamics			
	D) Solid modeling				
5.	Which CAD feature	e is used to conne	ect two compo	onents in an assembly	
	A) Extrusion	B) Loft	C) Mate		?
6.	Which file format is software?	commonly used	for exchanging	D) Revolve	veen different
	A) .DWG	B) .STL	C) .IGES	DY.PNG	
7.	Which of the follows A) Engine		7 11115	Dilalinine	
8.	What is the purpose	of tolerance analy	sis in automo	otive assembly model	ing?
	A) To determine the (B) To ensure parts fit C) To optimize aerod D) To estimate vehicle	cost of manufactu together correctly vnamics	rino	accountry model	mg;
9.	Which modeling tech curves? A) Fillet	nique is used to c		flowing surfaces bet	ween specified
	-/ - **********************************	B) Sweep	C) Loft	D) Chamfer	

	10. Which type of mate components?	erial properties are t	ypically input in	to FEA simulations for automotive
	A) Mechanical	B) Electrical	C) Thermal	D) All of the
	11. What is the primary			n an automobile?
	A) To provide stabil B) To absorb shocks C) To increase fuel of D) To generate elect	lity during accelerates from the road efficiency	ion	an automobile?
	12. Which CAD feature from a solid?	allows for the creat	ion of a hollow	component by removing material
	A) Extrude		C) Revolve	D) Loft
1	3. Which type of analys	sis is commonly use	ed to simulate air	flow around a vehicle?
	A) Finite element and C) Kinematic analysi	alysis B) Com	putational fluid ss analysis	
	A) Tensile strengthC) Coefficient of frict	B) Therration D) Youn	mal conductivity g's modulus	
		7) comome	c) Office	s into a single component? D) Attach
16	b. What is the role of CA modeling?	M (Computer-Aide	ed Manufacturing	g) in automotive assembly
	A) To simulate crash tC) To generate tool pa	ests E ths for machining I	B) To optimize for the strong of the strong	nel efficiency ess and strain
17				t blends two different shapes D) Sweep
18.	Which type of analysis	is used to study the	motion of comr	onents within an assembly?
	A) Stress analysis C) Thermal analysis	B) Kinem	atic analysis ynamic analysis	onents within an assembly?
19.	What does "DFM" stan A) Design for Maintena (2) Dynamic Finite Moo	ince B)	Design for Mar	ssembly modeling? aufacturing tion and Machining
20.	Which CAD command	allows for the dupli	cation of compo	nents within an assembly?
	A) Copy	B) Paste	C) Pattern	D) Duplicate

4	assemblies?	er is commonly us	ed to join tw	o sheet me	etal components in automotive
	A) Rivet	B) Bolt	91	Weld	D) Screw
22	2. Which CAD feature is	s used to create a l	peveled edge	on a com	onent?
	A) Fillet	B) Chamfer		Sweep	D) Loft
23	. What is the primary fu	unction of the brak	ting system i	in an auton	nobile?
	A) To regulate engineC) To generate electric	temperature cal power	B)	To convert To provide	kinetic energy into heat stability during acceleration
24	Which type of analysis conditions?A) Thermal analysisC) Stress analysis		the behavior B) Aerodyn D) Kinemat	amic analy	
25.	Which CAD feature all specified path?	lows for the creati	on of a featu	re by swee	eping a 2D shape along a
	A) Loft	B) Extrude	SYF	Revolve	D) Sweep



PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR 2022-2023

Assessment Test

MEA004 Modeling Practice for Automotive Assemblies

1.	Which software is co	mmonly used for	r CAD moo	deling	g in the automoti	ve industry?
	A) AutoCAD	B) Solid Wor			IATLAB	D) Blender
2.	In CAD modeling, wh	nat does "CAD"	stand for?			
	A) Computer-Ai B) Computer-As C) Computer-Ar D) Creative Arch	sisted Drafting nimated Drawing	5			
3.	What is the purpose of A) To simulate fluid of B) To analyze stress a C) To optimize fuel ef D) To design aesthetic	nd strain ficiency	analysis (F	EA) i	n automotive ass	sembly modeling?
4.	Which modeling techn A) Finite element anal B) Kinematic analysis	lysis	nly used for	r simu	llating crash test	s in automotive design?
	C) Computational flui	d dynamics				
	D) Solid modeling					
5.	Which CAD feature is	used to connect	two compo	onent	s in an assembly	?
	A) Extrusion	B) Loft	C) Mate		D) Revolve	
6.	Which file format is co software?	ommonly used fo	or exchangi	ing 3I	D CAD data betw	veen different
	A) .DWG	B) .STL	C) .IGES	S	D).PNG	
7.	Which of the following A) Engine	g is NOT a comp B) Wheel	c) Wing	monl	y modeled in aut D) Tailpipe	omotive assemblies?
8.	What is the purpose of	tolerance analys	sis in autom	notive	assembly mode	ling?
	A) To determine the co B) To ensure parts fit to C) To optimize aerodyn D) To estimate vehicle	st of manufactur ogether correctly namics	ring			
9.	Which modeling technicurves?	que is used to cr	reate smoot	th, flo	wing surfaces be	etween specified
	A) Fillet	B) Sweep	C) Loft	_	D) Chamfer	

1	10. Which type of mater components?	ial properties are	typically input in	nto FEA simulations for automot	tive
	A) Mechanical	B) Electrical	C) Thermal	D) All of the	
. 1	1. What is the primary	function of the sur	spension system	in an automobile?	
	A) To provide stabili B) To absorb shocks C) To increase fuel e D) To generate electr	ty during accelera from the road fficiency			
1	 Which CAD feature a from a solid? A) Extrude 	allows for the crea		component by removing materi	ial
1	3 Which town of 1				
1.	3. Which type of analys		sed to simulate a	rflow around a vehicle?	
	A) Finite element ana C) Kinematic analysis		mputational fluidess analysis	dynamics	
14	 Which material prope temperatures in an aut A) Tensile strength C) Coefficient of frict 	B) The	letermining a cor ermal conductivit ing's modulus	mponent's ability to withstand hi	igh
15	5. Which CAD command A) Merge	d is used to join to B) Combine	wo separate bodi C) Unite	es into a single component? D) Attach	
16	6. What is the role of CA modeling?	M (Computer-Ai	ded Manufacturi	ng) in automotive assembly	
	A) To simulate crash to C) To generate tool pa	ests ths for machining	B) To optimize D) To analyze s	fuel efficiency tress and strain	
17	Which CAD feature al smoothly?	lows for the creat	ion of a feature t	hat blends two different shapes	
	A) Fillet	B) Chamfer	C) Doft	D) Sweep	
18	. Which type of analysis	is used to study t	he motion of cor	nponents within an assembly?	
	A) Stress analysisC) Thermal analysis	B) Kine	ematic analysis odynamic analysi		
19.	What does "DFM" stan A) Design for Maintena C) Dynamic Finite Moo	ance	B) Design for M	assembly modeling? anufacturing cation and Machining	
20.	Which CAD command	allows for the du	plication of com	oonents within an assembly?	
	A) Copy	B) Paste	C) Patter	1	

2	1. Which type of fas assemblies?	stener is commonly	used to join two sheet me	etal components in automotiv
	A) Rivet	B) Bolt	C) Weld	D) Screw
22	2. Which CAD featu	re is used to create	a beveled edge on a comp	ponent?
	A) Fillet	B) Chamfer	C) Sweep	D) Loft
23	. What is the primar	ry function of the br	aking system in an auton	nobile?
	A) To regulate eng C) To generate ele	gine temperature	B) To convert	kinetic energy into heat estability during acceleration
24.	Which type of ana conditions?	lysis is used to predi		ponent under various loading
	A) Thermal analysis C) Stress analysis	is	B) Aerodynamic analy D) Kinematic analysis	vsis
25.	Which CAD featur specified path?	e allows for the crea	ation of a feature by swee	eping a 2D shape along a
	A) Loft	B) Extrude	C) Revolve	D) Sweep

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PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-2023

Assessment Test

	MEA004 Modeling Practice for Automotive Assemblies
	A) AutoCAD B) Solid Works (C)MATLAB D) Blender
2) = 1311001
	A) Computer-Aided Design 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 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 D) Tailpipe
8.	What is the purpose of tolerance analysis in automotive assembly modeling?
	A) To determine the cost of manufacturing 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 Chamfer

	10. Which type of mate components?	erial properties are t	ypically input i	nto FEA simulations for automotive	77 7
	A) Mechanical	B) Electrical	C) Thermal	(D) All of the	
	11. What is the primary	function of the sus			
	A) To provide stabil B) To absorb shocks C) To increase fuel (D) To generate elect	ity during accelerates from the road	ion	an an automobile?	
	12. Which CAD feature from a solid?A) Extrude	allows for the creat	ion of a hollow	component by removing material DLoft	
1	13. Which type of analys	sis is commonly use	ed to simulate a	irflow around a vehicle?	
	A) Finite element and C) Kinematic analysis	alysis B) Com	nputational fluid ss analysis		
1	 Which material proportions temperatures in an automaterial A) Tensile strength C) Coefficient of frictions 	Barher	etermining a commal conductiving's modulus	mponent's ability to withstand high	
1	5. Which CAD comman A) Merge	d is used to join two	o separate bodi C) Unite	es into a single component? D) Attach	
10	6. What is the role of CA modeling?	AM (Computer-Aid	ed Manufacturi	ng) in automotive assembly	
	A) To simulate crash t C) To generate tool pa	ests ths for machining	B) To optimize To analyze s	fuel efficiency tress and strain	
17				hat blends two different shapes D) Sweep	
18	. Which type of analysis	s is used to study the	e motion of cor	nponents within an assembly?	
	A) Stress analysis C) Thermal analysis	(B) Kinen	natic analysis ynamic analysi		
19.	What does "DFM" star A) Design for Mainten C) Dynamic Finite Mod	alice B) Design for M	assembly modeling? anufacturing cation and Machining	
20.	Which CAD command	allows for the dupl		onents within an assembly?	
	A) Copy	B) Paste	C) Patter		

21	. Which type of fastener assemblies?	r is commonly used to joi	n two sheet meta	l components in automotiv
	A) Rivet	B)Bolt	C) Weld	D) Screw
22	. Which CAD feature is	used to create a beveled	edge on a compo	nent?
	A) Fillet	(B) Chamfer	C) Sweep	D) Loft
23	. What is the primary fur	nction of the braking syst	em in an automo	
	A) To regulate engine t C) To generate electrical	emperature	B To convert k	inetic energy into heat tability during acceleration
24.	Which type of analysis conditions? A) Thermal analysis C) Stress analysis	B) Aero		onent under various loading
25.	Which CAD feature allo specified path?	ows for the creation of a	-	ing a 2D shape along a
	A) Loft	B) Extrude	C) Revolve	D) Sween

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PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

	Name of the Student: VIGINESH. R. Register No: 411521114035 Year: 2/18 Date of Feedback: 13/5/23. Course Name: MEADON / MODENING PRACTICE FOR AUTOMOTIVE ASSEMBLE
	1. How do you value the course content?
	Normy good content.
	2. How would you understand the content delivery by the instructor? Len understand see Suley
	3. Write the overall quality of the program
	Excellent Program.
4	4. Will you recommend this program to your friends/juniors/seniors?
	See 1x/i4 Suggest

Suggestions to improve, if any:

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING <u>FEEDBACK FORM</u>

ACADEMIC YEAR 2022-2023

Name of the Student: KISHORE. U Year: 2/1V Course Name: Mark 004/ Modeling Fauchice for Automotive Agenby 1. How do you value the course content?
1. How do you value the course content? Good Content.
2. How would you understand the content delivery by the instructor? Instructor? Ochburned Very Well
3. Write the overall quality of the program Levey hood.
4. Will you recommend this program to your friends/juniors/seniors?
YES
Suggestions to improve, if any:

Signature of the Student

PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

FEEDBACK FORM

ACADEMIC YEAR 2022-2023

Name of the Student: BAGADECSE! Register No: AUS 21114007.
Year: 2/18 Course Name: 19 EADON / Modeling Practice for Automotive A
Course Name: 19 EADON / Modeling Practice for Automotive A
1. How do you value the course content?
Excellent Content.
2. How would you understand the content delivery by the income
2. How would you understand the content delivery by the instructor? Instructor was highly knowled
3. Write the overall quality of the program Best, informatine
4 Will you recommend this
4. Will you recommend this program to your friends/juniors/seniors?
Suggestions to improve, if any:
NIL.

Signature of the Student



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 ______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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COORDINATOR



DEPARTMENT OF MECHANICAL ENGINEERING

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ADD ON COURSE IN

"MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms KISHORE.U
ofYear, 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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COORDINATOR

DEPARTMENT OF MECHANICAL ENGINEERING

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ADD ON COURSE IN

"MODELING PRACTICE FOR AUTOMOTIVE ASSEMBLIES"

CERTIFICATE OF PARTICIPATION

This is to certify that Mr / Ms. PRAGADEESH-K

of ______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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