

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DELIVERY PLAN

Academic Year		2023 -2024	Period of Batch	2021- 2025
Course Code		21CSV06	Semester	VI
Name of the Value added Course		ADVANCED JAVA PROGRAMMING		
Faculty Coordinator		Mr.K.Ravikumar		
Date(s)		05.01.2024 to 11.01.2024		
Hours		36 hrs		
S.No.	Date	Session	Topics to be Covered	Trainer Details
1	05.01.24	FN (3 Hrs)	Basic Syntax: Structure of a Java program-Data types, variables, and constants- Comments and documentation- Example Programs- Control Statements: Conditional statements (if, else, if, else)- Switch-case statements- Looping statements (for, while, do-while)-Example Programs- Object-Oriented Programming (OOP): Concepts of objects and classes- Inheritance, polymorphism, encapsulation, and abstraction- Constructors and destructors- Example programs Exception Handling: Understanding exceptions and errors-Try-catch blocks-Custom exception handling- Example programs	Dr M Ramya Devi Dr Satheesh Kumar D / Mr P Arul Selvam Ms Reena B
		AN (3 Hrs)		
2	06.01.24	FN (3 Hrs)	Applets and Swing: Basics of GUI -programming with AWT and Swing-Designing and implementing graphical interfaces -Example programs Introduction to Java API: Working with Java standard libraries- Utilizing predefined classes and methods -Example programs	Ms. K V Sreelekha Ms R Gayathri Ms V Devi
		AN (3 Hrs)		
3	08.01.24	FN (3 Hrs)	Java Database Connectivity (JDBC) Overview of JDBC -JDBC architecture -JDBC drivers - Connecting to Databases -Establishing database connections - Connection pooling -Example programs Executing SQL Queries - Prepared Statement and Callable Statement- Batch processing - Example programs	Mr M Priyadharsan Dr Prakash Mr Karthikeyan
		AN (3 Hrs)		
4	09.01.24	FN (3 Hrs)	Java Servlets - Introduction to Servlets - Servlet life cycle - Servlet containers -Servlet Configurations and Parameters - Initialization parameters - Context	Ms Sathya Mr D Magesh
		AN		

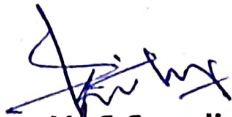
Hindusthan College of Engineering and Technology

An Autonomous Institution Affiliated to Anna University | Approved by AICTE, New Delhi

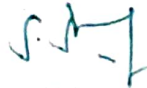
Accredited with 'A' Grade by NAAC | Accredited by NBA (ECE, MECH, EEE, IT & CSE)

Pollachi Highway, Coimbatore 641 032. | www.hicet.ac.in

		(3 Hrs)	parameters -Handling Form Data - GET and POST methods - HTML forms and servlets	Mr B Bharathi Kannan
5	10.01.24	FN (3 Hrs)	Mini project - Airline reservation system -Electricity billing system -Stock management system -Data visualization software -Library management system- Clinic management system	All Staffs involved in Value Added Courses
		AN (3 Hrs)		
6	11.01.24	FN (3 Hrs)	Mini project - Airline reservation system -Electricity billing system -Stock management system -Data visualization software -Library management system- Clinic management system	All Staffs involved in Value Added Courses
		AN (3 Hrs)		



VAC Coordinator



Head of the Department



Dean- Academics

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DELIVERY PLAN

Academic Year	2022-2023	Period of Batch	2020-2024
Course Code	22CSVC04	Semester	IV
Name of the Value added Course	HTML & CSS		
Faculty Coordinator	Mr.K.Ravikumar		
Date(s)	29.01.2024 to 03.02.2024		
Hours	36 hrs		

S.No.	Date	Session	Topics to be Covered	Trainer Details
1	29.01.2024	FN (3 Hrs)	HTML5,CSS and Hyberlinks Headers Para a hs,CSS Introduction- Selectors – Structuring Text in HTML – Text Formatting, Inline vs Internal vs External Styling – Lists, Images, Hyperlinks,Tables- CSS Display – CSS Backgrounds, Borders, Margins, Padding – CSS Font Styling – Styling Lists – Styling Tables, Forms – Anchor Tags – Divs	Mr M Ravikumar AP/CSE Ms Umapriya AP/CSE Mr Lakshmanan AP/CSE
		AN (3 Hrs)		
2	30.01.2024	FN (3 Hrs)	HTML Forms and Styling Forms – Form attributes, styling – Form Elements – Input Types – Input Attributes – Input Form Attributes	Mr M Ravikumar AP/CSE Ms Umapriya AP/CSE Mr Lakshmanan AP/CSE
		AN (3 Hrs)		
3	31.01.2024	FN (3 Hrs)	CSS 3 Animations Transitions, Transformations, Animations – Box Sizing – Flex – Animation & Transformation, Positioning	Mr M Ravikumar AP/CSE Ms Umapriya AP/CSE Mr Lakshmanan AP/CSE
		AN (3 Hrs)		
4	01.02.2024	FN (3 Hrs)	Introduction to JavaScript Introduction – Variables, Scoping, Datatypes - Strings and Numbers – Operators and Loops – Functions	Mr Rajagopal AP/CSE Ms Reena AP/CSE Mr Dhanapal Professor/CSE
		AN (3 Hrs)		
5	02.02.2024	FN (3 Hrs)	Web Performance Optimization: Importance of web performance and loading speed,Techniques for optimizing images, CSS,	Mr Rajagopal AP/CSE Ms Reena AP/CSE Mr Dhanapal
		AN		



Hindusthan College of Engineering and Technology

An Autonomous Institution Affiliated to Anna University | Approved by AICTE, New Delhi

Accredited with 'A++' Grade by NAAC | Accredited by NBA

Pollachi Highway, Coimbatore 641 032. | www.hicet.ac.in

		(3 Hrs)	and JavaScript Lazy loading and deferred loading strategies Introduction to Content Delivery Networks (CDNs) and caching	Professor/CSE
6	03.02.2024	FN (3 Hrs)	Project and Recap Assigning a Small project that integrates the learned concepts (e.g web page with database connectivity and dynamic content) – Project development and implementation – Recap of key topics and review any difficult areas	Mr Rajagopal AP/CSE Ms Reena AP/CSE Mr Dhanapal Professor/CSE
		AN (3 Hrs)		


VAC Coordinator


Head of the Department


Dean Academics

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DELIVERY PLAN

Academic Year	2023-2024	Period of Batch	2022-2026
Course Code	22CSVC03	Semester	III
Name of the Value added Course	C AND C++		
Faculty Coordinator	Mr.K.Ravikumar		
Date(s)	04.09.2023 to 09.09.2023		
Hours	36 hrs		

S.No.	Date	Session	Topics to be Covered	Trainer Details
1	04.09.2023	FN (3 Hrs)	C++ Basics and Object-Oriented Programming: Introduction to C++: classes, objects, and inheritance Polymorphism and virtual functions Operator overloading and templates Exception handling and error management	Mr M Ravikumar Dr Satheesh Kumar
		AN (3 Hrs)		
2	05.09.2023	FN (3 Hrs)	Advanced C Programming: pointers and memory management Function pointers and callbacks Dynamic memory allocation and deallocation Advanced data structures: linked lists, trees, and graphs Advanced C++ Features: Standard Template Library (STL): containers, algorithms, and iterators Smart pointers and memory management Lambda expressions and functional programming in C++ Move semantics and rvalue references	Mr M Ravikumar Dr Satheesh Kumar
		AN (3 Hrs)		
3	06.09.2023	FN (3 Hrs)	Software Design Principles: Design patterns: creational, structural, and behavioral patterns Object-oriented design principles: SOLID principles Code refactoring and optimization techniques Debugging strategies and tools	Mr M Priyadharsan Dr Amutha M



Hindusthan College of Engineering and Technology

An Autonomous Institution Affiliated to Anna University | Approved by AICTE, New Delhi

Accredited with 'A' Grade by NAAC | Accredited by NBA

Pollachi Highway, Coimbatore 641 032. | www.hicet.ac.in

		AN (3 Hrs)	<p>Application Development with C/C++: Systems programming with C/C++: file I/O, processes, and threads Network programming and socket programming Introduction to game development with C/C++ Developing cross-platform applications with C/C++</p>	
4	07.09.2023	FN (3 Hrs)	<p>Security and Best Practices: Common security vulnerabilities in C/C++ programs Secure coding practices and defensive programming Memory safety and buffer overflow prevention Code reviews and static code analysis tools</p> <p>Project Development: Group project: Design and develop a C/C++ application from scratch Apply concepts learned throughout the course Collaborate with team members to implement features and functionality Present the final project to the class</p>	<p>Mr M Priyadharsan</p> <p>Dr Amutha M</p>
5	08.09.2023	FN (3 Hrs)	<p>Mini project : Customer billing system, Bank management system, Student Record system</p>	<p>All Staffs involved in Value Added Courses</p>
		AN (3 Hrs)		
6	09.09.2023	FN (3 Hrs)	<p>Mini project : Sales management system, Payroll management system</p>	<p>All Staffs involved in Value Added Courses</p>
		AN (3 Hrs)		

[Signature]

VAC Coordinator

[Signature]

Head of the Department

Principal

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DELIVERY PLAN

Academic Year	2023 -2024	Period of Batch	2021- 2025
Course Code	21CSVC05	Semester	V
Name of the Value added Course	Interactive Web Designing		
Faculty Coordinator	Mr.K.Ravikumar		
Date(s)	16.08.2023 to 22.08.2023		
Hours	36 hrs		

S.No.	Date	Session	Topics to be Covered	Trainer Details
1	16.08.2023	FN (3 Hrs)	HTML5, CSS and Hyberlinks CSS Introduction- Selectors – Structuring Text in HTML – Text Formatting, Inline vs Internal vs External Styling – Lists, Images, Hyperlinks, Tables- CSS Display – CSS Backgrounds, Borders, Margins, Padding – CSS Font Styling – Styling Lists – Styling Tables, Forms – Anchor Tags - Divs	Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE
		AN (3 Hrs)	HTML Forms and Styling Forms – Form attributes, styling – Form Elements – Input Types – Input Attributes – Input Form Attributes	
2	17.08.2023	FN (3 Hrs)	CSS 3 Animations Transitions, Transformations, Animations – Box Sizing – Flex – Animation & Transformation, Positioning Introduction to JavaScript Introduction – Variables, Scoping, Datatypes - Strings and Numbers – Operators and Loops - Functions	Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE
		AN (3 Hrs)		
3	18.08.2023	FN (3 Hrs)	DOM and BOM DOM – BOM – Developers Tools in Web Browsers	Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE
		AN (3 Hrs)		

Hindusthan College of Engineering and Technology

An Autonomous Institution Affiliated to Anna University | Approved by AICTE, New Delhi

Accredited with 'A' Grade by NAAC | Accredited by NBA (ECE, MECH, EEE, IT & CSE)

Pollachi Highway, Coimbatore 641 032. | www.hicet.ac.in

4	19.08.2023	FN (3 Hrs)	HTML5, CSS and Hyberlinks CSS Introduction- Selectors – Structuring Text in HTML – Text Formatting, Inline vs Internal vs External Styling – Lists, Images, Hyperlinks, Tables- CSS Display – CSS Backgrounds, Borders, Margins, Padding – CSS Font Styling – Styling Lists – Styling Tables, Forms – Anchor Tags - Divs HTML Forms and Styling Forms – Form attributes, styling – Form Elements – Input Types – Input Attributes – Input Form Attributes	Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE
		AN (3 Hrs)		
5	21.08.2023	FN (3 Hrs)	CSS 3 Animations Transitions, Transformations, Animations – Box Sizing – Flex – Animation & Transformation, Positioning Introduction to JavaScript Introduction – Variables, Scoping, Datatypes - Strings and Numbers – Operators and Loops - Functions	Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE
		AN (3 Hrs)		
6	22.08.2023	FN (3 Hrs)	DOM and BOM DOM – BOM – Developers Tools in Web Browsers	Trainers from Consensus academy Coimbatore and Mr Magesh D, AP / CSE Mr Priyadharshan M, AP / CSE Dr Prakash J, AP / CSE
		AN (3 Hrs)		


VAC Coordinator


Head of the Department


Dean Academics

DEPARTMENT OF AERONAUTICAL ENGINEERING

VALUE ADDED COURSE- DESIGN AND DRAFTING USING SOLID WORKS

LESSON PLAN

SEMESTER: III (ODD)

DURATION: 42 HRS

Course Objective

- The course aims to give students and professionals the essentials that is needed to become a known SOLIDWORKS associate.
- It will help individuals use the software with confidence and design/draft the next innovative thing.
- Skill to Build, control, and analyze assemblies for fit and function.
- Able to compete the industrial standards with known subject knowledge.

Sl. No.	Details of Module	Hours	Resource Person
1.	<p>Introduction to Solid Works</p> <ul style="list-style-type: none"> ➤ SolidWorks Graphical User Interface ➤ Feature manager design tree, Callouts, Handles ➤ Confirmation corner, mouse buttons, keyboard shortcuts, Command Manager, ➤ Hardware and Software requirements, ➤ SolidWorks Task Scheduler 	5	Mr. M. Magesh Kumar Assistant Professor Aeronautical Engg.
2.	<p>SKETCHER</p> <ul style="list-style-type: none"> ➤ Sketch Entities, Sketch Tools ➤ Blocks – Make block, Edit block, Insert block, Add/Remove Entities, Rebuild, Save, Explode ➤ Relations - Adding Sketch Relation, Automatic relations, ➤ Dimensioning - Smart, Horizontal, Vertical, Ordinate, Horizontal ordinate, Vertical ordinate, Align ordinate, fully define sketch. ➤ Sketch Diagnosis, Sketch Expert , 3D Sketching, Rapid Sketch 	6	Mr. Arun Raja K K Assistant Professor Aeronautical Engg.
3.	<p>PART MODELING</p> <ul style="list-style-type: none"> ➤ Part Modeling Tools ➤ Creating reference planes ➤ Creating Extrude features, Revolve features ➤ Creating Swept features, Loft features ➤ Creating curves, Fillet features, Hole types ➤ Creating Chamfer, Shell, Rib, Pattern ➤ Advanced Modeling Tools ➤ Inserting Fastening features 	6	Mr. Ramkumar M Design Engineer Teslead Equipments Private Limited.

Sl. No.	Details of Module	Hours	Resource Person
4.	ASSEMBLY <ul style="list-style-type: none"> ➤ Assembly Modeling Tools ➤ Introduction to Assembly, Modeling & Approaches ➤ Applying Standard Mates, Applying Smart mates ➤ Applying Mate reference ➤ Manipulating Components ➤ Creating Pattern, Explode Views ➤ Top Down Design 	6	Mr. Sri Hari M Design Engineer Ramco Systems
5.	SURFACE MODELING <ul style="list-style-type: none"> ➤ Creating Extrude, Revolve, Swept, loft, Boundary surface. ➤ Inserting Planar Surface, Offset Surface, Radiate Surface. 	2	Mr. K. Manoj Kumar Assistant Professor Aeronautical Engg.
6.	DRAFTING <ul style="list-style-type: none"> ➤ Generating Drawing Views ➤ Introduction To Angle Of Projection ➤ Generating Views ➤ Creating Dimensions ➤ Inserting Annotations 	3	Mr. Anand B Senior Design Engineer, Tata Consultancy Services, Madurai
7.	SHEET METAL <ul style="list-style-type: none"> ➤ Sheet Metal Design ➤ Working with import data 	2	
8.	WELDMENT DESIGN & MOLD DESIGN <ul style="list-style-type: none"> ➤ Introduction to Weldment, 3D sketch ➤ Introduction of Mold, type of mold design, how to used draft analysis ➤ Introduction to CAE/CDM 	3	
9.	GD & T <ul style="list-style-type: none"> ➤ Features and Rules of GD&T, Datum's Control ➤ Adding GD&T to a Drawing/Design ➤ Form Tolerances, Orientation Tolerances, Profile Tolerances ➤ Location Tolerances, Runout Tolerances 	4	Mr. K. Kathirvel Assistant Professor Aeronautical Engg.
10.	PRODUCT DATA MANAGEMENT <ul style="list-style-type: none"> ➤ Introduction to PDM, LAN, WAN, Server, client, user, administrator ➤ Creating new project, Check In/Check Out of a new document, viewing the configurations. ➤ Archive/Restore a document, Delete/Rollback a document 	3	Mr. N. Sarath Chander Director, EDS Technologies
11.	DATA MIGRATION <ul style="list-style-type: none"> ➤ Build and analyze for fit and function Discussion ➤ Detailing 	2	



TOTAL: 42 HRS

Course Outcome: The student will be able to

1. Demonstrate competency with multiple drawing and modification commands in SolidWorks.
2. Create three-dimensional assemblies incorporating multiple solid models.
3. Apply industry standards in the preparation of technical mechanical drawings.
4. SOLIDWORKS has advanced skills and the students can chose carrier in many sectors dealing with product design, validation, manufacturing, etc.


Faculty In-charge


HOD/AERO

**Chairman - BoS
AERO - HICET**


DEAN
**Dean (Academics)
HICET**

PUMO TECHNOVISION CREO SOFTWARE TRAINING
ACADEMIC YEAR : 2023-2024 SEMESTER : VI
COURSES NAME : SOLID WORKS

DELIVERY PLAN

S.NO	DATE	TOPIC	NO OF HRS
1	23.01.24	A) SolidWorks Graphical User Interface B) Feature manager design tree, Callouts, Handles C) Confirmation corner, mouse buttons, keyboard shortcuts, Command Manager, D) Hardware and Software requirements, E) SolidWorks Task Scheduler	6
2	24.01.24	A) Blocks - Make block, Edit block, Insert block, Add/Remove Entities, Rebuild, Save, Explode B) Relations - Adding Sketch Relation, Automatic relations, C) Dimensioning - Smart, Horizontal, Vertical, Ordinate, Horizontal ordinate, Vertical ordinate, Align ordinate, fully define sketch. D) Sketch Diagnosis, Sketch Expert, 3D Sketching, Rapid Sketch	6
3	29.01.24	A) Part Modeling Tools B) Creating reference planes C) Creating Extrude features, Revolve features D) Creating Swept features, Loft features	6
4	30.01.24	A) Creating curves, Fillet features, Hole types B) Creating Chamfer, Shell, Rib, Pattern C) Advanced Modeling Tools D) Inserting Fastening features	6
5	31.02.24	A) Assembly Modeling Tools B) Introduction to Assembly, Modeling & Approaches C) Applying Standard Mates, Applying Smart mates D) Applying Mate reference E) Manipulating Components F) Creating Pattern, Explode Views G) Top Down Design	6
6	01.02.24	A) Creating Extrude, Revolve, Swept, loft, Boundary surface. B) Inserting Planar Surface, Offset Surface, Radiate Surface.	6

K. Subramish
FACULTY INCHARGE

[Signature]
HOD/MECH

[Signature]
DEAN ACADEMICS



HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institution

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai
Accredited by NBA (AERO, AUTO, CIVIL, CSE, ECE, EEE, IT, MECH & MCT)

Accredited with 'A++' Grade by NAAC.

Coimbatore - 641 032



PUMO TECHNOVISION CREO SOFTWARE TRAINING

ACADEMIC YEAR : 2023- 2024

SEMESTER : V

COURSES NAME : THERMAL CUTTING, 3D PRINTER , CMM AND HI-RACEING LAB

DELIVERY PLAN

S.NO	DATE	TOPIC	NO OF HRS
1	23/01/24	A) Basics of thermal cutting process B) Basics of oxy fuel cutting process C) Plasma cutting process A) Laser cutting proses	6
2	24/01/24	A) Demonstration by virtual mode on thermal cutting prosses B) Demonstration virtually on oxy fuel cutting prosses C) Demonstration virtually on plasma cutting prosses D) Demonstration virtually on laser cutting prosses	6
3	29/01/24	A) Objective type test on thermal cutting prosses B) Oxy fuel cutting prosses C) Plasma cutting prosses D) Laser cutting prosses	6
4	30/01/24	A) Introduction 3D printer and-types B) Wood router C) Stereolithography D) Selective laser sintering E) Digital light prosses F) Multi jet fusion G) Poly jet H) Electron beam melting I) Direct metal laser sintering	6
5	31/02/24	A) Introduction – coordinate measuring machine B) Types of coordinate measuring machine C) Basics principle of CMM D) Uses of CMM in industry E) Need of CMM	6
6	01/02/24	A. Design and fabrication of concept vehicle B. Design concepts on in e-vehicles solar powerd vehicle	6


FACULTY INCHARGE


HOD/MECH


DEAN ACADEMICS



Hindusthan College of Engineering and Technology
Approved by AICTE, New Delhi, Accredited with 'A' Grade by NAAC
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Coimbatore – 641 032.



DEPARTMENT OF MECHANICAL ENGINEERING

Value Added Course

Training on Thermal Cutting Process, 3D Printer, CMM and Hi-Racing Lab


SCHEDULE

Class: II Year B.E Mechanical Engineering (Section – B)
Semester: IV

Batch: 2023-2027
Academic Year: 2023-2024

Date	Timing	Theory/ Practical	Course Instructor	Topic Covered
29.01.2024	9.30 am to 4.30 pm	Theory / Practical	Dr.V.SenthilMurugan, Associate Professor Mr. S.Ramkumar Assistant Professor	Introduction on thermal cutting process
30.01.2024	9.30 am to 4.30 pm	Theory / Practical	Dr. V.SenthilMurugan, Associate Professor Dr.K.Sriharrish Assistant Professor	Demonstration of thermal Cutting process
31.01.2024	9.30 am to 4.30 pm	Theory / Practical	Dr.K.Sriharrish, Assistant Professor Mr. S.Alagar, Assistant Professor	Assessment on thermal cutting process
01.02.2024	9.30 am to 4.30 pm	Theory / Practical	Mr.S.Ramkumar, Assistant Professor Mr.K.Rameshkumar Assistant Professor	3D Printer and Wood router
02.02.2024	9.30 am to 4.30 pm	Practical	Mr. S.Alagar Assistant Professor Dr.K.Sriharrish Assistant Professor	Co-ordinate Measuring Machine
03.02.2024	9.30 am to 4.30 pm	Practical	Dr. Y.Rasmathew Assistant Professor Mr. S.Ramkumar, Assistant Professor	Design and fabrication of future concept vehicles


Faculty Incharge


HOD


DEAN-Academics


Principal

DEPARTMENT OF MECHANICAL ENGINEERING

SYLLABUS

Training on Thermal Cutting Process, 3D Printer, CMM and Hi-Racing Lab

Course Objective:


- To Know the oxy-fuel cutting, plasma cutting and laser cutting processes.
- To learn the faster and more efficient prototyping of the object.
- To create patterns in wood like round off, work top edges, etc.
- To learn the basic concepts in Coordinate measuring machine.
- To gain knowledge about design and fabrication of future concept vehicles.

Sl. No.	Module	Details of Module	No. of Hours
1.	Introduction on thermal cutting process	<ul style="list-style-type: none"> ➤ Basics of thermal cutting process ➤ Basics of oxy fuel cutting process ➤ Plasma cutting process ➤ Laser cutting process 	6
2.	Demonstration of thermal Cutting process	<ul style="list-style-type: none"> ➤ Demonstration by virtual mode on thermal cutting process ➤ Demonstration virtually on oxy-fuel cutting process ➤ Demonstration virtually on plasma cutting process ➤ Demonstration virtually on laser cutting process 	6
3.	Assessment on thermal cutting process	<ul style="list-style-type: none"> ➤ Objective type test on thermal cutting process ➤ Oxy-fuel cutting process ➤ Plasma cutting process ➤ Laser cutting process 	6
4.	3D Printer and Wood router	<ul style="list-style-type: none"> ➤ Introduction -3D printer and types ➤ Wood router ➤ Stereolithography ➤ Selective Laser Sintering ➤ Digital Light Process ➤ Multi Jet Fusion ➤ PolyJet ➤ Direct Metal Laser Sintering ➤ Electron Beam Melting ➤ Hands on training on Fused Deposition Modeling 	6

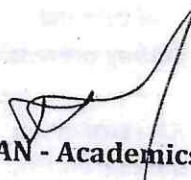
Sl. No.	Module	Details of Module	No. of Hours
5.	Co-ordinate Measuring Machine	<ul style="list-style-type: none"> ➤ Introduction – Coordinate measuring machine ➤ Types of Coordinate measuring machine ➤ Basic principles of CMM ➤ Uses of CMM in Industry ➤ Need of CMM 	6
6.	Design and fabrication of future concept vehicles	<ul style="list-style-type: none"> ➤ Design and fabrication of future concept vehicles ➤ Design Concepts in e-vehicles ➤ Solar powered vehicles 	6
Total Hours			36

Course Outcome:

- To know the various modern welding cutting process like oxy-fuel, plasma and laser etc.
- To create complex three-dimensional prototype models.
- To achieve the carving out the complex shapes from the wood.
- To understand coordinate measuring machine concepts.
- To demonstrate the basic concepts of design and fabrication of vehicles


Faculty In-charge


HOD/MECH


DEAN - Academics





Hindusthan College of Engineering and Technology
Approved by AICTE, New Delhi, Accredited with 'A' Grade by NAAC
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Coimbatore – 641 032.



DEPARTMENT OF MECHANICAL ENGINEERING


Value Added Course On Solid Works

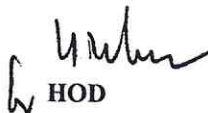
SCHEDULE

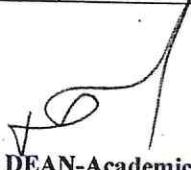
Class: III Year B.E Mechanical Engineering (Section – A)
Semester: VI

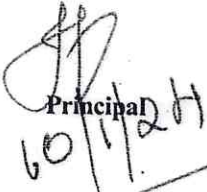
Batch: 2021-2025
Academic Year: 2023-2024

Date	Timing	Theory/ Practical	Course Instructor	Topic Covered
23.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. C.A.Jagadesh, Assistant Professor Mr. D.Prabu, Assistant Professor	Introduction to Solid Works
24.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. C.A.Jagadesh, Assistant Professor Mr. D.Prabu, Assistant Professor	Solid Works SKETCHER
29.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. A.Nazeer Ahammed, Assistant Professor Mr. S.Sivakumar, Assistant Professor	Solid Works PART MODELING
30.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. A.Nazeer Ahammed, Assistant Professor Mr. S.Sivakumar, Assistant Professor	Solid Works PART MODELING
31.01.2024	9.30 am to 4.30 pm	Practical	Mr. M.Senthil Kumar, CAD-Instructor Mr. C.A.Jagadesh, Assistant Professor	Solid Works ASSEMBLY
01.02.2024	9.30 am to 4.30 pm	Practical	Mr. M.Senthil Kumar, CAD-Instructor Mr. C.A.Jagadesh, Assistant Professor	Solid Works SURFACE MODELING


Faculty Incharge


HOD


DEAN-Academics


Principal
60/1/24



Hindusthan College of Engineering and Technology
Approved by AICTE, New Delhi, Accredited with 'A' Grade by NAAC
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Coimbatore – 641 032.



DEPARTMENT OF MECHANICAL ENGINEERING

Value Added Course On Solid Works

SCHEDULE

Class: III Year.B.E Mechanical Engineering (Section – B)
Semester: VI


Batch: 2021-2025
Academic Year: 2023-2024

Date	Timing	Theory/ Practical	Course Instructor	Topic Covered
23.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. M.Senthil Kumar, CAD-Instructor Mr. S.Ramkumar Assistant Professor	Introduction to Solid Works
24.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. M.Senthil Kumar, CAD-Instructor Mr. S.Ramkumar Assistant Professor	Solid Works SKETCHER
29.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. C.A.Jagadesh, Assistant Professor Mr. S.Alagar, Assistant Professor	Solid Works PART MODELING
30.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr. C.A.Jagadesh, Assistant Professor Mr. S.Alagar, Assistant Professor	Solid Works PART MODELING
31.01.2024	9.30 am to 4.30 pm	Practical	Mr. A.Nazeer Ahammed Assistant Professor Mr. D.Prabhu, Assistant Professor	Solid Works ASSEMBLY
01.02.2024	9.30 am to 4.30 pm	Practical	Mr. A.Nazeer Ahammed Assistant Professor Mr. S.Sivakumar, Assistant Professor	Solid Works SURFACE MODELING


Faculty Incharge


HOD


DEAN-Academics


Principal
10/1/24



Hindusthan College of Engineering and Technology
Approved by AICTE, New Delhi, Accredited with 'A' Grade by NAAC
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Coimbatore – 641 032.



DEPARTMENT OF MECHANICAL ENGINEERING

Value Added Course

Training on Thermal Cutting Process, 3D Printer, CMM and Hi-Racing Lab

SCHEDULE

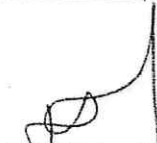
Class: II Year B.E Mechanical Engineering (Section – A)
Semester: IV


Batch: 2022-2026
Academic Year: 2023-2024

Date	Timing	Theory/ Practical	Course Instructor	Topic Covered
29.01.2024	9.30 am to 4.30 pm	Theory / Practical	Dr.K.R.Sakthivel, Associate Professor Mr. S.Alagar Assistant Professor	Introduction on thermal cutting process
30.01.2024	9.30 am to 4.30 pm	Theory / Practical	Dr.K.R.Sakthivel, Associate Professor Dr.K.Sriharrish Assistant Professor	Demonstration of thermal Cutting process
31.01.2024	9.30 am to 4.30 pm	Theory / Practical	Mr.S.Alagar, Assistant Professor Dr.K.Sriharrish, Assistant Professor	Assessment on thermal cutting process
01.02.2024	9.30 am to 4.30 pm	Theory / Practical	Mr.S.Alagar, Assistant Professor Mr.K.Rameshkumar Assistant Professor	3D Printer and Wood router
02.02.2024	9.30 am to 4.30 pm	Practical	Mr.K.Rameshkumar Assistant Professor Mr.S.Alagar Assistant Professor	Co-ordinate Measuring Machine
03.02.2024	9.30 am to 4.30 pm	Practical	Dr.Y.Rasmathew Assistant Professor Mr. S.Ramkumar, Assistant Professor	Design and fabrication of future concept vehicles


Faculty Incharge


HOD


DEAN-Academics


Principal

DELIVERY PLAN

Timing: 9.30 AM to 12.30 PM & 1.30 PM to 4.30 PM

S.No	TITLE OF THE CONTENT	DATE	NO.OF HOURS	RESOURCE PERSON
1	Advanced Python Language Features Decorators and Metaclasses- Understanding decorators ,Creating custom decorators , Metaclasses and their applications Context Managers- Writing context managers using with statement, Implementing context managers with contextlib module.	29.01.2024 FN	3	ATHIRA S (AP/IT) JENCY C (AP/IT)
2	Functional Programming in Python Functional Programming Concepts- First-class functions, Higher-order functions, Pure functions and immutability Lambda Functions and Closures- Writing and using lambda functions, Understanding closures and their applications	29.01.2024 AN	3	PRIYADHARSHINI T R (AP/IT) MASILAMANI M (AP/IT)
3	Asynchronous Programming Introduction to Asynchronous Programming Understanding asynchronous vs synchronous code, Asyncio module and event loop Coroutines- Writing asynchronous functions (coroutines),Managing coroutines using asyncio	30.01.2024 FN	3	KARTHIK S(AP/IT) AMUTHA R(AP/IT)
4	Design Patterns in Python	30.01.2024	3	ATHIRA S (AP/IT)

	Creational Design Patterns Singleton, Factory Method, Abstract Factory Structural Design Patterns Adapter, Decorator, Composite Behavioral Design Patterns Observer, Strategy, Command	AN		JENCY C(AP/IT)
5	Web Development with Flask/Django Flask or Django Introduction Setting up a basic web application, Routing and views ORM (Object-Relational Mapping) SQLAlchemy (Flask) or Django ORM, Database models and migrations	31.01.2024 FN	3	PRIYADHARSHINI T R(AP/IT) MASILAMANI M(AP/IT)
6	Data Science and Machine Learning with Python NumPy and Pandas Advanced data manipulation with NumPy and Pandas Scikit-learn Introduction to machine learning algorithms	31.01.2024 AN	3	KARTHIK S(AP/IT) AMUTHA R(AP/IT)
7	Testing in Python Unit testing with unittest or pytest, Test fixtures and parameterized tests, Mocking and test-driven development	01.02.2024 FN	3	ATHIRA S (AP/IT) JENCY C(AP/IT)
8	Concurrency and Parallelism Multiprocessing vs multithreading, Python's concurrent. futures module, Parallelism with multiprocessing and threading	01.02.2024 AN	3	PRIYADHARSHINI T R(AP/IT) MASILAMANI M(AP/IT)
9	Advanced File Handling Working with binary files, Reading and writing JSON, CSV, and other formats, Serialization and deserialization.	02.02.2024 FN	3	KARTHIK S(AP/IT) AMUTHA R(AP/IT)

10	Advanced Web Development RESTful APIs Design principles, Building RESTful APIs in Flask/Django Authentication and Authorization Token-based authentication, Role-based access control	02.02.2024 AN	3	ATHIRA S (AP/IT) JENCY C(AP/IT)
11	Advanced Python Libraries Advanced NumPy and Pandas Memory optimization techniques Advanced data manipulation tasks Deep Learning with TensorFlow/Keras Introduction to neural networks Building and training deep learning models	03.02.2024 FN	3	PRIYADHARSHINI T R(AP/IT) MASILAMANI M(AP/IT)
12	DevOps and Deployment Containerization with Docker Docker basics, Containerizing a Python application Deployment Strategies Deploying to cloud platforms (e.g., AWS, Heroku), Continuous Integration and Continuous Deployment (CI/CD)	03.02.2024 AN	3	KARTHIK S(AP/IT) AMUTHA R(AP/IT)
TOTAL HOURS				36 HOURS

M. Madh
Coordinator

[Signature]
HOD

[Signature]
DEAN-ACADEMICS

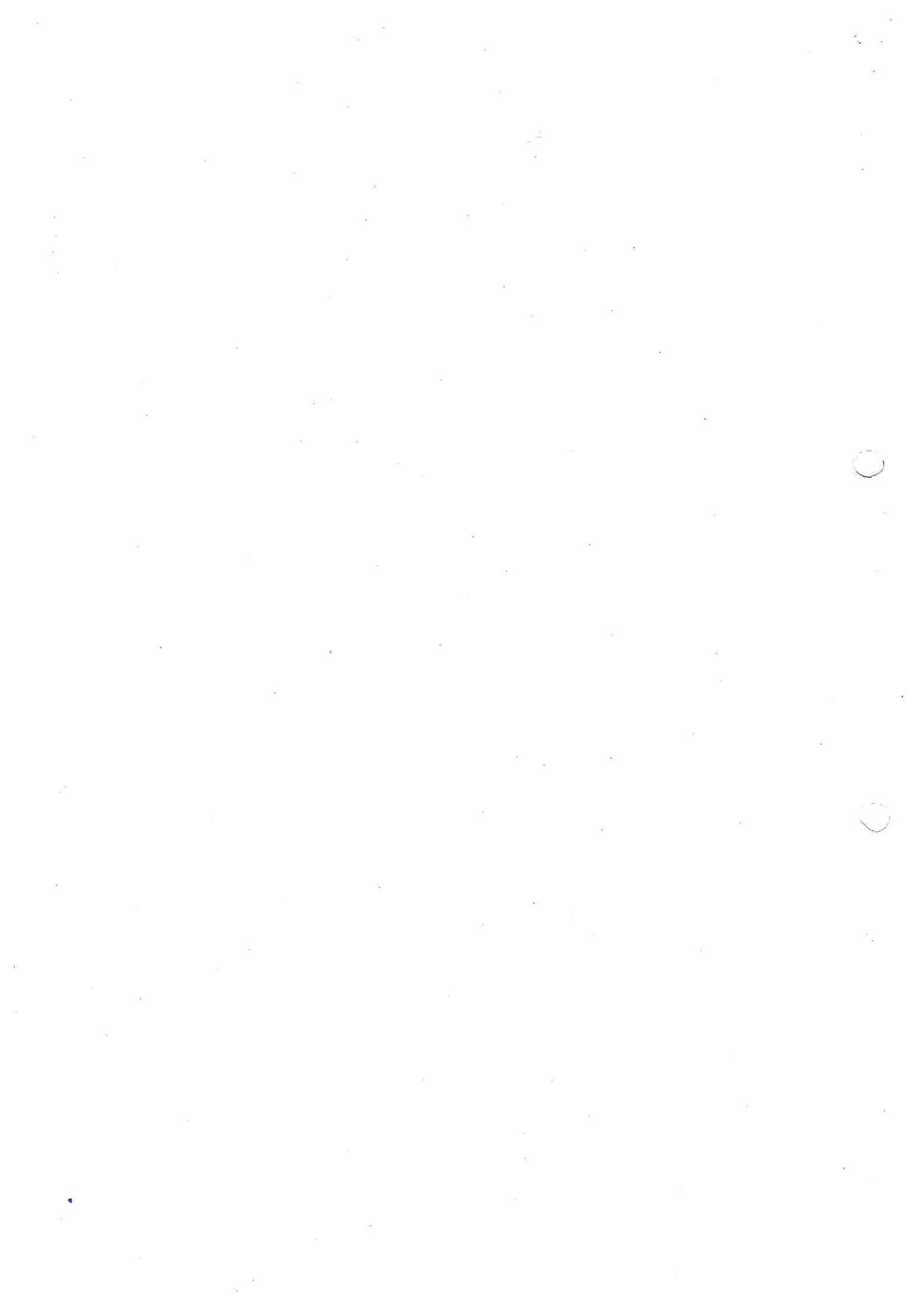
[Signature]
PRINCIPAL



DELIVERY PLAN

Timing: 9.30 AM to 12.45 PM (FN) & 1.30 PM to 4.45 PM (AN)

S.No	TITLE OF THE CONTENT	DATE	NO. OF HOURS	RESOURCE PERSON
1.	Blocks, units, and declarations PL/SQL data types	04.01.2024 FN	3	MR.SWAMINATHAN G.
2.	IF-THEN-ELSE statements CASE statements Looping constructs	04.01.2024 AN	3	MR.SWAMINATHAN G.
3.	Opening, fetching, and closing cursors Cursor FOR loop	05.01.2024 FN	3	MR.SWAMINATHAN G.
4.	RAISE, EXCEPTION, and PRAGMA EXCEPTION_INIT Handling multiple exceptions	05.01.2024 AN	3	MR.SWAMINATHAN G.
5.	Creating overloaded procedures Benefits and use cases	06.01.2024 FN	3	MR.SWAMINATHAN G.
6.	Creating overloaded functions Differences from procedures	06.01.2024 AN	3	MR.SWAMINATHAN G.
7.	Creating and using packages Advantages of using packages	08.01.2024 FN	3	MR.SWAMINATHAN G.
8.	Procedures, functions, and variables in packages Package initialization and finalization	08.01.2024 AN	3	MR.SWAMINATHAN G.
9.	Types of triggers (BEFORE, AFTER, INSTEAD OF) Trigger execution timing	09.01.2024 FN	3	DR.GANESAN K.



10.	DML triggers Compound triggers	09.01.2024 AN	3	DR.GANESAN K.
11	Dynamic SQL with DBMS_SQL	10.01.2024 FN	3	DR.GANESAN K.
12	Bulk processing Using BULK COLLECT and FORALL	10.01.2024 AN	3	DR.GANESAN K.
TOTAL HOURS				36

Mr Sabaraj
HOD

Dr. Indira Kumar
DEAN - ACADEMICS

[Signature]
PRINCIPAL



**HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY
COIMBATORE 641 032**



(An Autonomous Institution, Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai, Accredited with "A++" Grade by NAAC)

DEPARTMENT OF INFORMATION TECHNOLOGY

II YEAR III SEM VAC DELIVERY PLAN(AY 2023 - 2024)BATCH(2022 – 2026)

Timing: AN(4:45 to 6:45Pm)

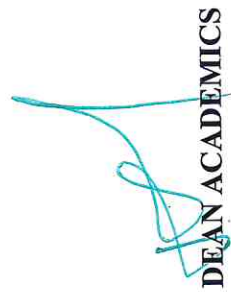
S.No	TITLE OF THE CONTENT	DATE	NO.OF HOURS	RESOURCE PERSON
1	In-Depth Pointers and Memory Management - Advanced pointer techniques (pointer to pointer, function pointers) Memory management strategies (smart pointers, memory pools) Complex Data Structures - Implementing advanced data structures: graphs, tries, and self-balancing trees, Exploring memory layout implications on data structures.	8.9.2023 AN	2 hours	Dr. Beulah David Associate Professor
2	Advanced Algorithms - Analysis of sorting and searching algorithms (complexity considerations), Implementing graph algorithms: Dijkstra's, A*, etc.	9.9.2023 AN	2 hours	Ms.Jency.C Assistant Professor
3	Callbacks and Function Pointers - Deep dive into function pointers and their applications in callback mechanisms, Implementing event-driven programming using callbacks	11.9.2023 AN	2 hours	MS.Priyadharshini.T.R Assistant Professor

4	<p>Unit 2: System-Level Programming File and I/O Operations - Advanced I/O: Non-blocking I/O, memory-mapped files, File system interaction and performance optimization. Process and Thread Management - Advanced process management: Daemon processes and job control, Thread safety and concurrency in shared resources. Inter-process Communication (IPC) – implementing</p>	12.9.2023 AN	2 hours	Ms.Masilamani.M Assistant Professor
5	<p>optimizing different IPC mechanisms, Synchronization issues and solutions in IPC. Signals and Process Management - Advanced signal handling techniques and implications in system programming</p>	13.9.2023 AN	2 hours	Dr.Beulah David Associate Professor
6	<p>Unit 3: Low-Level Programming and Embedded Systems Memory Layout and Performance Optimization - Understanding C's memory model: stack, heap, and static memory, Profiling memory usage and optimizing algorithms for performance. Embedded Systems Fundamentals - Introduction to hardware interfaces and device drivers, Writing low-level code for microcontrollers and hardware interaction,</p>	14.9.2023 AN	2 hours	Ms.Jency.C Assistant Professor
7		15.9.2023 AN	2 hours	MS.Priadharshini.T.R Assistant Professor
8		19.9.2023 AN	2 hours	Ms.Masilamani.M Assistant Professor

9	Bitwise Operations and Algorithm Implementation - Advanced use of bitwise operators in performance-critical applications, Implementing data compression and encryption algorithms using bit manipulation	20.9.2023 AN	2 hours	Dr.Beulah David Associate Professor
10	Unit 4: Networking and Concurrency Network Programming Essentials - Socket programming: Advanced techniques for TCP/IP and UDP, Understanding and implementing RESTful APIs in C.	21.9.2023 AN	2 hours	Ms.Jency.C Assistant Professor
11	Concurrency and Synchronization Mechanisms - Advanced threading models and their implementation, Lock-free programming techniques and their use cases.	22.9.2023 AN	2 hours	MS.Priadharshini.T.R Assistant Professor
12	Handling Race Conditions and Deadlocks - Analyzing and resolving concurrency issues in multithreaded environments.	23.9.2023 AN	2 hours	Ms.Masilamani.M Assistant Professor
13	Unit 5: Modern C Practices and Tools Debugging Techniques and Best Practices - Utilizing tools like GDB and Valgrind for memory debugging, Advanced debugging strategies: Core dumps and post-mortem analysis.	25.9.2023 AN	2 hours	Dr.Beulah David Associate Professor
14	Code Quality and Maintenance - Best practices for writing maintainable portable C code Implementing static analysis tools and coding standards,	26.9.2023 AN	2 hours	Ms.Jency.C Assistant Professor

15	Modern C Standards and Enhancements - Exploring features of C11 and C18 (multithreading, atomics, etc.). Adapting legacy code to modern C practices and standards.	27.9.2023 AN	2 hours	MS.Priadharshini.T.R Assistant Professor
Total duration				30


HoD


DEAN ACADEMICS


PRINCIPAL

Contents Delivery Plans

Session Timing: 10 AM to 1.00 PM & 02.00 PM to 4.30 PM

S.No	Title of the Content	Date	No.of Hours	Name of the Faculty
1	Introduction to Python, Features of Python, Install Python and Environment Setup, Python Identifiers, Keywords and Indentation, Comments, Python Data Types, Variables, Getting User Input, Simple input & Output, Simple Output Formatting, Operators in Python.	10.07.2023	6	Ms Sakthisree T AP/IT Ms Jency C AP/IT
2	Introduction to Control Statements : if-else, if-elif-else, while loop , for loop break , continue, assert ,pass and Simple Programs.	11.07.2023	6	Ms Amudha R AP/IT Ms Priyadharshini T R AP/IT
3	Introduction to lists, List Methods and Operations , Accessing Values in Lists , Updating Lists, Delete List Elements, Basic List Operations, Indexing, Slicing, and Matrixes, Built-in List Functions & Methods.	12.07.2023	6	Dr Beulah David ASP/IT Ms Athira AP/IT
4	Tuple Operations and Methods : Accessing Values in Tuples, Updating Tuples, Delete Tuple Elements, Basic Tuples Operations, Indexing, Slicing, and Matrixes, Built-in Tuple Functions.	13.07.2023	6	Ms Sakthisree T AP/IT Ms Jency C AP/IT
5	Creating a set, Adding items to the set, Python Set Operations, Python Built-in set methods, Accessing Values in Dictionary, Updating Dictionary, Delete Dictionary Elements, Built-in Dictionary Functions & Methods.	14.07.2023	6	Ms Amudha R AP/IT Ms Priyadharshini T R AP/IT
6	Creating String , Indexing and splitting, Deleting, String Operators, Python String Formatting, Python String functions, Functions- Defining a function, Calling a Function, return statement.	15.07.2023	6	Dr Beulah David ASP/IT Ms Athira AP/IT

TOTAL NO.OF HOURS: 36

DELIVERY PLAN

Timing: 9.30 AM to 12.30 PM & 1.30 PM to 4.30 PM

S.NO	TITLE OF THE CONTENT	DATE	NO. OF HOURS	RESOURCE PERSON
1.	Introduction to PLC, CPU and Programming	30.01.2024	6	Mr. Kesavaraj K Assistant Professor Hindusthan College of Engineering and Technology
2.	Hardware, Logic and Control Instructions	31.01.2024	6	Mr. Thilak G Assistant Professor Hindusthan College of Engineering and Technology
3.	Various Operations & Tools Tools	01.01.2024	4	Mr. Prabhu T Assistant Professor Hindusthan College of Engineering and Technology
		01.02.2024	3	Mr. Kesavaraj K Assistant Professor Hindusthan College of Engineering and Technology
4.	Programming with PLC (Explanation & Practice Session)	02.02.2024	5	Mr D Naveen Programmer Impress Apparel Machines Private Limited, Bangalore
5.	Programming with PLC (Explanation & Practice Session)	03.02.2024	5	Mr U Krishnamoorthy Program Head SSS Controls and Automation, Bangalore
6.	Programming with PLC (Practice Session)	03.02.2024	3	Mr. Shane John Paul AI Developer Redspectra Instruments Pvt Ltd
Total Hours				32

EXPERT SESSIONS (OUTSIDE OF HICET)

S.NO	TITLE OF THE CONTENT	DATE	NO. OF HOURS	DETAILS OF THE EXPERT
1.	Programming with PLC (Explanation & Practice Session)	02.02.2024	5	Mr D Naveen Programmer Impress Apparel Machines Private Limited, Banglore
2.	Programming with PLC (Explanation & Practice Session)	03.02.2024	5	Mr U Krishnamoorthy Program Head SSS Controls and Automation Banglore
3.	Programming with PLC (Practice Session)	03.02.2024	3	Mr. Shane John Paul AI Developer Redspectra Instruments Pvt Ltd

LEARNING OUTCOMES

Participants will find out why and how classic bulk material flow difficulties take place by:

- Interface the hardware component in real time environment
- Program, Simulate and run the various industrial applications through PLC module.
- Qualified PLC/HMI programming engineers to meet the requirements of designing appropriate industrial automation systems.
- On completion of these content, Engineers are ready to take on any Machine, Process or Plant Automation assignment.


COORDINATOR


HOD


DEAN - ACADEMICS


PRINCIPAL

Dean (Academics)
HICET

PRINCIPAL
Hindusthan College Of Engineering & Technology
COIMBATORE - 641 032.

