



ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

ACCREDITED BY NAAC WITH 'A' Grade

PROGRAMME SCHEME & SYLLABI 2021 – 2022

B.Tech – Mechanical Engineering & M.Tech.(CAD/CAM)

About the department

The department of mechanical engineering is committed to develop competent engineers by transforming industry oriented knowledge and conducting skill development programs. The Department is offering B.Tech. Programme in Mechanical Engineering with an intake of 60 and M.Tech. Programme in CAD-CAM with an intake of 18. The basic assets of the department are 28 well qualified and dynamic teaching faculty members with 11 PhD's having average teaching experience of 17 years. Apart from this, Labs of the department are well equipped with modern equipment and the classrooms are ICT enabled for making teaching learning an interesting and interactive process. The department faculty members have authored books with reputed publication houses. They have also published research papers in reputed international journals & conferences and filed patents.

Department has a 'Design Center' with latest state-of-the-art workstations for graphic applications. Various CAD softwares like Pro-E, AutoCAD, Hypermesh and Inventor are available for designing & prototyping. Also, the facility of 3D printing gives a complete visual feel of designed product.

To bridge the curriculum gap between academic and industry, various skill development programs like Industrial automation, CNC machine training, Machine fault diagnosis & signal processing and CAD training are provided to the students. The department has tie up with various industries for students' internship to enhance their professional knowledge and skills. Industrial relations further enhance our credibility, hence industry based projects and regular Industrial visits for students of all semesters are a common practice.

Vision

To develop competent Mechanical Engineers through an industry oriented program to serve the society

Mission

- To impart quality technical education to meet intellectual, ethical and career challenges.
- To inculcate self- learning ability and develop communication & teamwork skills in students to excel in the profession.

Program education objectives

PEO1: Pursue successful careers in Mechanical engineering through their strong foundation in mathematics, science and engineering.

PEO2: Analyse and design appropriate solutions for socially relevant problems by using current engineering techniques.

PEO3: Exhibit professionalism, ethical attitude, managerial & communication skills, team work and social responsibility in their profession.

PEO4: Identify opportunities to expand their horizon beyond Mechanical engineering and adapt to current trends by engaging in continuous learning.

Program outcomes

PO1: Engineering knowledge

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis

Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solution

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability

Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team.

PO12: Life-long learning

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program specific outcomes**PSO1: Analysis of Mechanical System**

Design and Analysis of complex mechanical systems and components using modern design and analysis tools.

PSO2: Advance Manufacturing and Automation

Propose latest manufacturing practices and design various manufacturing processes using CNC and automation tools.

ANNEXURE – I

ST VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY

MECHANICAL ENGINEERING

Credit Structure for Undergraduate program in Mechanical Engineering

(B.Tech Mechanical Engineering)

Sr. No	Category	Credits	AICTE Norms
1	Humanities, Social Sciences & Management courses	15	15
2	Basic Science courses	24	25
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc.	18	24
4	Professional core courses	58	48
5	Professional Elective courses relevant to chosen specialization/branch	19	18
6	Open subjects – Electives from other technical and /or emerging subjects	12	18
7	Project work, seminar and internship in industry or elsewhere	20	15
8	Mandatory Courses [Environmental Sciences, Induction training, Indian Constitution, Essence of Indian Knowledge Tradition]	0	0
9	Comprehensive Courses [Industry Training and Skill Development, Capstone Course]	4	0
	TOTAL	170	

Scheme of Examination for First Year (Semester I and II)
Bachelor of Technology
GROUP 1: SEMESTER I / GROUP 2: SEMESTER II

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	AS101T	Engineering Physics & Material Sciences	4	1	-	5	30	70	100
2	AS101P	Engineering Physics & Material Sciences Lab	-	-	2	1	25	25	50
3	AS102T	Applied Mathematics – I	3	1	-	4	30	70	100
4	AS103T	Engineering Practices-I (Electrical & Electronics)	4		-	4	30	70	100
5	AS103P	Engineering Practices-I Lab(Electrical & Electronics)	-	-	2	1	25	25	50
6	AS104T	Logic building with C	3	-		3	30	70	50
7	AS104P	Logic building with C Lab			2	1	25	25	50
8	AS105T	Communication Skills-I	2	-	-	2	15	35	50
9	AS105P	Communication Skills-I Lab			2	1	25	25	50
10	AS106P	Sports & Yoga			2	0			
11	AS107P	Skill development (Emerging technologies)			2	0			
Total			16	2	12	22	235	415	650

Induction Program - 3 weeks

Scheme of Examination for First Year (Semester I and II)
Bachelor of Technology
GROUP 1: SEMESTER II / GROUP 2: SEMESTER I

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	AS201T	Engineering Chemistry & Environmental Science	4	1	-	5	30	70	100
2	AS201P	Engineering Chemistry & Environmental Science Lab	-	-	2	1	25	25	50
3	AS202T	Applied Mathematics – II	3	1	-	4	30	70	100
4	AS203T	Engineering Practices-II (Civil & Mechanical)	4		-	4	30	70	100
5	AS203P	Engineering Practices-II Lab(Civil & Mechanical)	-	-	2	1	25	25	50
6	AS204T	Problem Solving with Python	3	-	-	3	30	70	100
7	AS204P	Problem Solving with Python Lab	-	-	2	1	25	25	50
8	AS205T	Essence of Indian Knowledge Tradition	2			0			
9	AS206T	Communication Skills-II	2	-	-	2	15	35	50
10	AS206P	Communication Skills-II Lab			2	1	25	25	50
11	AS207P	Tinkering & Model Lab			2	0			
Total			18	2	10	22	235	415	650

* Induction Program – 3 weeks

Scheme of Examination of Bachelor of Technology (Mechanical Engineering)

Semester Pattern

III Semester B. Tech. Mechanical Engineering

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	AS301T	Applied Mathematics – III	3	1	-	4	30	70	100
2	ME301T	Manufacturing Processes	3	-	-	3	30	70	100
3	ME301P	Manufacturing Processes Lab	-	-	2	1	25	25	50
4	ME302T	Fluid Mechanics & Hydraulic Machines	3	1	-	4	30	70	100
5	ME302P	Fluid Mechanics & Hydraulic Machines Lab	-	-	2	1	25	25	50
6	ME303T	Materials Engineering	4	-	-	4	30	70	100
7	ME303P	Materials Engineering Lab	-	-	2	1	25	25	50
8	ME304T	Engineering Graphics	2	-	-	2	15	35	50
9	ME304P	Engineering Graphics Lab	-	-	2	1	25	25	50
10	AS302T	Constitution of India	2	-	-	0	15	35	50
11	ME305P	Sports, Yoga, & Career Development *	-	-	2	0	-	-	-
Total			17	2	10	21	250	450	700

* Career Development (Interpersonal Skills, Aptitude and Logical Thinking)

Scheme of Examination of Bachelor of Technology (Mechanical Engineering)
Semester Pattern
IV Semester B. Tech. Mechanical Engineering

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	ME401T	Engineering Thermodynamics	3	1	-	4	30	70	100
2	ME402T	Machining Processes	3	-	-	3	30	70	100
3	ME402P	Machining Processes Lab	-	-	2	1	25	25	50
4	ME403T	Strength of Material	3	1	-	4	30	70	100
5	ME403P	Strength of Material Lab	-	-	2	1	25	25	50
6	ME404T	Kinematics & Dynamics of Machines	3	1	-	4	30	70	100
7	ME404P	Kinematics & Dynamics of Machines Lab	-	-	2	1	25	25	50
8	ME405P	Machine Drawing Lab	-	-	2	1	25	25	50
9	H 102	Universal Human Values - 2	3	-	-	3	30	70	100
10	ME406P	Technical Skill Development	-	-	2	1	-	50	50
11	ME407T	Career Development *	2	-	-	0	-	-	-
Total			17	3	10	23	250	500	750

* Career Development (Interpersonal Skills, Aptitude and Logical Thinking)

Scheme of Examination of Bachelor of Technology (Mechanical Engineering)

Semester Pattern V Semester B. Tech. Mechanical Engineering

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	ME501T	Heat Transfer	3	-	-	3	30	70	100
2	ME501P	Heat Transfer Lab	-	-	2	1	25	25	50
3	ME502T	Energy Conversion-I	3	-	-	3	30	70	100
4	ME503T	Design of Machine Elements	2	1	-	3	30	70	100
5	H103/4T	Foundational Humanities Elective	2	-	-	0	-	-	-
6	ME504T	Open Elective - I	3	-	-	3	30	70	100
7	ME504P	Open Elective - I Lab	-	-	2	1	25	25	50
8	ME505T	Elective - I	2	1	-	3	30	70	100
9	AS501T	Economics and Management	4	-	-	4	30	70	100
10	AS502T	English for Engineers	2	-	-	2	15	35	50
11	ME506P	Technical Skill Development **	-	-	2	1	-	50	50
12	ME507P	Career Development *	-	-	4	0	-	-	-
Total			21	2	10	24	245	555	800

* Career Development (Interpersonal Skills, Aptitude and logical thinking)

** Technical Skill Development – Desirable to have industry skill enhancement

ME504T	Open Elective - I
ME504T(i)	Automobile Engineering
ME504T(ii)	Machinery Fault Diagnosis & Signal Processing

ME504P	Open Elective – I Lab
ME504P(i)	Automobile Engineering
ME504P(ii)	Machinery Fault Diagnosis & Signal Processing

H103/4T	Foundational Humanities Elective
H-103	Development of Societies
H 104	Philosophy

ME505T	Elective - I
ME505T(i)	Mechanical Vibrations
ME505T(ii)	Synthesis of Mechanism
ME505T(iii)	Advanced Manufacturing Techniques
ME505T(iv)	Gas Dynamics and Jet Propulsion
ME505T(v)	Tribology

Scheme of Examination of Bachelor of Technology (Mechanical Engineering)
Semester Pattern
VI Semester B. Tech. Mechanical Engineering

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	ME601T	Operation Research & Industrial Engineering	3	1	-	4	30	70	100
2	ME602T	Energy Conversion-II	3	-	-	3	30	70	100
3	ME602P	Thermal Engineering Lab	-	-	2	1	25	25	50
4	ME603T	Elective - II	3	-	-	3	30	70	100
5	ME604T	Elective - III	3	-	-	3	30	70	100
6	ME605T	Elective - IV	3	-	-	3	30	70	100
7	ME606T	Open Elective-II	3	1	-	4	30	70	100
8	ME607P	Project - I	-	-	4	2	50	-	50
9	ME608P	Career Development*	-	-	4	0	-	-	-
10	ME609P	Capstone Course – I **	-	-	2	1	25	25	50
Total			18	2	12	24	280	470	750

* Career Development (Interpersonal Skills, Aptitude and logical thinking)

** Capstone Course – I (Comprehensive knowledge gained in Mechanical Engineering)

ME603T	Elective - II
ME603T(i)	Machine Fault Diagnosis
ME603T(ii)	Production Planning & Control
ME603T(iii)	Convective Heat Transfer
ME603T(iv)	Organizational Entrepreneurship Development
ME603T(v)	Advanced IC Engine
ME603T(vi)	Hydraulics & Pneumatics
ME603T(vii)	Computational Fluid Dynamics

ME604T	Elective - III
ME604T (i)	Computer Graphics
ME604T (ii)	Additive Manufacturing
ME604T (iii)	Power Plant Engineering
ME604T (iv)	Total Quality Management
ME604T (v)	Green & Sustainable Manufacturing
ME604T (vi)	CNC & Robotics
ME604T (vii)	Alternate Fuels

ME606T	Open Elective - II
ME606T(i)	Fuel Cell Technology
ME606T(ii)	Design of Experiments

ME605T	Elective – IV
ME605T(i)	Design Optimization
ME605T(ii)	Stress Analysis
ME605T(iii)	Design of Mechanical Power Transmission System
ME605T(iv)	Advance Material Handling System
ME605T(v)	Energy Conservation and Management
ME605T(vi)	Cryogenics Technology
ME605T(vii)	Heating Ventilation & Air Conditioning
ME605T(viii)	Reliability Engineering

Scheme of Examination of Bachelor of Technology (Mechanical Engineering)
Semester Pattern
VII Semester B. Tech. Mechanical Engineering

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	
1	ME701T	Automation in Production	3	-	-	3	30	70	100
2	ME701P	Automation in Production Lab	-	-	2	1	25	25	50
3	ME702T	Elective - V	3	-	-	3	30	70	100
4	ME702P	Elective - V Lab	-	-	2	1	25	25	50
5	ME703T	Elective - VI	3	-	-	3	30	70	100
6	ME704T	Open Elective - III	4	-	-	4	30	70	100
7	ME705P	Project - II	-	-	8	4	75	75	150
8	ME706P	Summer / Winter Internship *	-	-	-	2	-	-	-
9	ME707P	Capstone Course – II **			2	1	25	25	50
Total			13	-	14	22	270	430	700

* Summer / Winter Internship (Evaluation of Four weeks Internship Completion till 6th Semester)

** Capstone Course – II (Comprehensive knowledge gained in Mechanical Engineering)

ME702T	Elective - V
ME702T(i)	Finite Element Method
ME702T(ii)	Refrigeration & Air conditioning
ME702T(iii)	Computer Integrated Manufacturing
ME702T(iv)	Mechatronics
ME702T(v)	Mechanical Measurement & Metrology

ME702P	Elective - V Lab
ME702P(i)	Finite Element Method
ME702P(ii)	Refrigeration & Air conditioning
ME702P(iii)	Computer Integrated Manufacturing
ME702P(iv)	Mechatronics
ME702P(v)	Mechanical Measurement & Metrology

ME703T	Elective - VI
ME703T(i)	Tool Design
ME703T(ii)	Design of Material Handling System
ME703T(iii)	Supply Chain Management
ME703T(iv)	Combustion & Emission
ME703T(v)	Composite Materials
ME703T(vi)	Design of Heat Exchangers
ME703T(vii)	Solar Energy & Utilization

ME704T	Open Elective - III
ME704T(i)	Industrial Robotics
ME704T(ii)	Renewable Energy Resources

Scheme of Examination of Bachelor of Technology (Mechanical Engineering)
Semester Pattern
VIII Semester B. Tech. Mechanical Engineering

Option A

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	ME801P	Project based on one semester internship in Industry/Research Institute/ National Laboratories/ Incubation Center	-	-	-	12	300	100	400
Total			0	0	0	12	300	100	400

***End semester examination will consist of evaluation of seminar & project report.**

Option B

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	ME802P	Institutional Internship	-	-	12	6	100	100	200
2	ME803P	Project - III	-	-	12	6	100	100	200
Total			-	-	24	12	200	200	400

Option B is available to students only after recommendation of the concerned Head of the department. The project and internship should contribute towards career development plan of the students.

Scheme for Honors (Semester IV to VIII) Mechanical Engineering

COMPUTER INTEGRATED PRODUCT DESIGN

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	MEH1401T	Product Design Process	3	1	-	4	30	70	100
2	MEH1501T	CAD and Additive manufacturing	3	-	-	3	30	70	100
3	MEH1501P	CAD and Additive manufacturing Lab	-	-	2	1	25	25	50
4	MEH1601T	Product Life Cycle Management	3	-	-	3	30	70	100
5	MEH1601P	Product Life Cycle Management Lab	-	-	2	1	25	25	50
6	MEH1701T	Tool Design and CAM	3	-	-	3	30	70	100
7	MEH1701P	Tool Design and CAM Lab	-	-	2	1	25	25	50
8	MEH1801T	Adv. FEM	3	-	-	3	30	70	100
9	MEH1801P	Adv. FEM Lab	-	-	2	1	25	25	50
Total			15	1	8	20	250	450	700

Scheme for Honors (Semester IV to VIII) Mechanical Engineering

AUTOMATION AND ROBOTICS

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	MEH2401T	Fundamentals of Automation	4	-	-	4	30	70	100
2	MEH2401P	Automation Lab	-	-	2	1	25	25	50
3	MEH2501T	Fundamentals of Robotics	4	-	-	4	30	70	100
4	MEH2601T	Mechanics of Robot	3	1	-	4	30	70	100
5	MEH2701T	Automation System Design	4	-	-	4	30	70	100
6	MEH2701P	Automation System Design Lab	-	-	2	1	25	25	50
7	MEH2801P	Mini Project	-	-	4	2	50	50	100
Total			15	1	8	20	220	380	600

Scheme for Minors (Semester IV to VIII)

Mechanical Engineering

RENEWABLE ENERGY RESOURCES

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	MEM401T	Wind Energy	3	1	-	4	30	70	100
2	MEM401P	Case study on wind energy system	-	-	2	1	50	-	50
3	MEM501T	Solar Energy	3	1	-	4	30	70	100
4	MEM501P	Case study on solar energy system	-	-	2	1	50	-	50
5	MEM601T	Bio-fuels and Biomass	3	1	-	4	30	70	100
6	MEM601P	Case study on Bio-energy	-	-	2	1	50	-	50
7	MEM701T	Hydro and Ocean Energy	3	1	-	4	30	70	100
8	MEM701P	Case study on hydro energy	-	-	2	1	50	-	50
Total			12	4	8	20	320	280	600

ST VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY
MECHANICAL ENGINEERING DEPARTMENT
Credit Structure for Postgraduate Program in Mechanical Engineering

M.Tech. CAD-CAM

Sr. No	Category	Credits
1	Professional core courses	26
2	Programme Elective courses	15
3	Dissertation & Seminar	26
4	Open Elective Courses	3
5	Audit	0
	TOTAL	70

Scheme of Examination of Master of Technology (CAD-CAM)

Semester Pattern

Ist Semester M.Tech. CAD-CAM

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	CAD101T	Computer Integrated Manufacturing	3	-	-	3	30	70	100
2	CAD101P	Computer Integrated Manufacturing Lab	-	-	4	2	50	50	100
3	CAD102T	Computer Aided Design	3	-	-	3	30	70	100
4	CAD102P	Computer Aided Design Lab	-	-	4	2	50	50	100
5	CAD103T	Industrial Robotics & Machine Vision	3	-	-	3	30	70	100
6	CAD104T	Elective-I	3	-	-	3	30	70	100
7	CAD105T	Elective-II	3	-	-	3	30	70	100
8	CAD106P	Technical Seminar & Research paper Writing/ IPR/ Quantative Methods/ Design of Experiments	-	-	2	-	-	-	-
Total			15	0	10	19	250	450	700

CAD104T	Elective - I
CAD104T(i)	Design of Hydraulic and Pneumatic Systems
CAD104T(ii)	Machine Fault diagnosis
CAD104T(iii)	Tribology Design

CAD105T	Elective - II
CAD105T (i)	Advance Engineering Materials
CAD105T (ii)	Reliability Engineering
CAD105T (iii)	Artificial Intelligence

Scheme of Examination of Master of Technology (CAD-CAM)

Semester Pattern

IInd Semester M.Tech. CAD-CAM

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	CAD201T	Advance FEM	3	-	-	3	30	70	100
2	CAD201P	Advance FEM Lab	-	-	4	2	50	50	100
3	CAD202T	Computer Aided Tool Design	3	-	-	3	30	70	100
4	CAD202P	Computer Aided Tool Design Lab	-	-	4	2	50	50	100
5	CAD203T	Product Design and Developmet	3	-	-	3	30	70	100
6	CAD204T	Elective-III	3	-	-	3	30	70	100
7	CAD205T	Elective-IV	3	-	-	3	30	70	100
8	CAD206P	Technical Seminar & Research paper Writing/ IPR/ Quantative Methods/ Design of Experiments/	-	-	2	-	-	-	-
Total			15	0	10	19	250	450	700

CAD204T	Elective - III
CAD204T(i)	Design of Material Handling Systems
CAD204T(ii)	Design for Manufacturing and Assembly
CAD204T(iii)	Additive Manufacturing

CAD205T	Elective - IV
CAD205T(i)	Manufacturing system Integration and management
CAD205T(ii)	Modelling and Simulation
CAD205T(iii)	Agile Manufacturing

Scheme of Examination of Master of Technology (CAD-CAM)

Semester Pattern

IIIrd Semester M.Tech. CAD-CAM

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	CAD302T	Elective-V	3	-	-	3	30	70	100
2	CAD303T	Open Elective	3	-	-	3	30	70	-
3	CAD301P	Dissertation Phase-I	-	-	20	10	50	50	100
Total			6	0	20	16	60	140	100

CAD302T	Elective - V
CAD302T (i)	Supply Chain Management
CAD302T (ii)	Advance Mechanism Design

CAD303T	Open Elective
CAD303T(i)	Industrial Safety
CAD303T (ii)	Operations Research
CAD303T (iii)	Cost Management of Engineering Projects
CAD303T (iv)	Composite Materials
CAD303T (v)	Waste to Energy

Scheme of Examination of Master of Technology (CAD-CAM)

Semester Pattern

IVth Semester M.Tech. CAD-CAM

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	CAD401P	Dissertation Phase-II	-	-	32	16	200	200	400
Total			0	0	32	16	200	200	400