SESHADRI RAO

GUDLAVALLERU ENGINEERING COLLEGE

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)
Seshadri Rao Knowledge Village, GUDLAVALLERU – 521 356

* * *

Minutes of the 28th Meeting of the Academic Council held on 20-12-2025, Saturday through online (Microsoft Teams).

Members Joined:

Sl. No.	Name of the Member	Designation	User Action	Timestamp
1	Dr. Burra Karuna Kumar Principal	Chairman	Joined	20/12/2025, 11:37:28 AM
2	Dr. A. H. L. Swaroop Associate Professor & Head, Dept. of CE	Member	Joined	20/12/2025, 11:59:04 AM
3	Dr. A. Amarendra Professor & Head, Dept. of EEE	Member	Joined	20/12/2025, 11:37:47 AM
4	Dr. K. Ch. Kishor Kumar Professor & Head, Department of ME	Member	Joined	20/12/2025, 11:59:21 AM
5	Dr. B. Rajasekhar Professor & Head, Department of ECE	Member	Joined	20/12/2025, 11:52:48 AM
6	Dr. M. Babu Rao Professor & Head, Department of CSE	Member	Joined	20/12/2025, 11:39:33 AM
7	Dr. D. N. V. S. L. S. Indira Professor & Head, Department of IT	Member	Joined	20/12/2025, 11:56:39 AM
8	Dr. Y. Adilakshmi Professor & Head, Dept. of CSE (AI&ML)	Member	Joined	20/12/2025, 11:56:27 AM
9	Dr. S. Narayana Professor & Head, Dept. of AI&DS	Member	Joined	20/12/2025, 11:56:00 AM
10	Dr. Y. Syamala Professor & Head, Dept. of IoT	Member	Joined	20/12/2025, 11:58:41 AM
11	Dr. G. Kamal Assistant Professor & Head, Dept. of MBA	Member	Joined	20/12/2025, 11:57:37 AM
12	Dr. S. Suresh Assoc. Professor in Physics & Head, BS&H	Member	Joined	20/12/2025, 11:52:25 AM
13	Dr. G. Raja Kumar Asst. Prof. & Head, Department of English	Member	Joined	20/12/2025, 11:54:20 AM
14	Dr. K. Syam Sundar Professor of ME & CoE	Member	Could not Join	---
15	Mr. M. N. Hari Krishna Training and Placement Officer	Member	Could not Join	---
16	Dr. P. Ravindra Babu Professor of ME & Advisor to the Management ***(Principal's Nominee)***	Member	Joined	20/12/2025, 12:22:00 AM
17	Dr. M. Kamaraju Professor of ECE, Director (AS&A) ***(Principal's Nominee)***	Member	Joined	20/12/2025, 11:53:59 AM
18	Dr. P. Kodanda Rama Rao Professor of CE & Vice Principal - Administration ***(Principal's Nominee)***	Member	Joined	20/12/2025, 12:03:35 AM
19	Mrs. Ch. Sujatha Assoc. Professor of EEE ***(Principal's Nominee)***	Member	Joined	20/12/2025, 12:23:10 AM
20	Dr. Ch. Rambabu Assoc. Prof. of ECE ***(Principal's Nominee)***	Member	Joined	20/12/2025, 11:57:01 AM

Sl. No.	Name of the Member	Designation	User Action	Timestamp
21	Dr. K. Lal Kishore Director, R&D, CVR College of Engineering, Hyderabad, Former Vice – Chancellor, JNTUA, Ananthapur, Former Rector, JNTUH, Hyderabad ***(Governing Body Nominee)***	Member	Joined	20/12/2025, 11:55:40 AM
22	Dr. D. V. L. N. Somayajulu Director, National Institute of Technology Manipur, Langol, Imphal-795004, Manipur ***(Governing Body Nominee)***	Member	Joined	20/12/2025, 11:58:33 AM
23	Mr. Sailendra Meduri Technical Lead & Program Manager, L&T Technology Services, Chennai ***(Governing Body Nominee)***	Member	Joined	20/12/2025, 11:51:45 AM
24	Dr. Ramanujam Parthasarathy Professor of English, Flat No. 108, Sri Ram's Koneru Residency, Dr.No.48-13-17B, Sri Ramachandra Nagar, Vinayaka Gudie Street, Vijayawada. ***(Governing Body Nominee)***	Member	Joined	20/12/2025, 11:59:28 AM
25	Sri Ramesh Babu Alajangi Founder & CEO, Ramesh's Aerospace Products & Services Private Limited, L. K. Towers, Roy Nagar, Gannavaram - 521 101. ***(Governing Body Nominee)***	Member	Joined	20/12/2025, 11:57:41 AM
26	Dr. M H M Krishna Prasad Professor of CSE, UCEK, Kakinada and Director, Academics, JNTUK, Kakinada, ***(Affiliating University Nominee)***	Member	Joined	20/12/2025, 11:58:11 AM
27	Prof. G. Padmaja Rani Professor of Physics, UCEK, Kakinada, and Director of Evaluation, JNTUK, Kakinada, ***(Affiliating University Nominee)***	Member	Joined	20/12/2025, 12:01:06 AM
28	Prof. M. Nageswara Rao Professor of EEE, UCEK, JNTUK, Kakinada, ***(Affiliating University Nominee)***	Member	Joined	20/12/2025, 11:59:33 AM
29	Dr. M. R. Ch. Sastry Prof. of ME & Vice Principal – Academics	Member Secretary	Joined	20/12/2025, 11:39:22 AM

28.01 To confirm the minutes of the 27th Meeting of the Academic Council held on 19-09-2025.

Resolution: The Minutes of the 27th Academic Council meeting held on 19-09-2025 have been confirmed.

28.02 To present the action taken report on the minutes of the 27th Academic Council Meeting.

The following suggestions were made by the Members of the Academic Council

Agenda & Minutes	Action Taken
27.01 To confirm the minutes of the 26th Meeting of the Academic Council held on 20-05-2025. **Resolution**: The Minutes of the 26th Academic Council meeting held on 20-05-2025 have been confirmed.	-

Agenda & Minutes	Action Taken
27.02 To present the action taken report on the minutes of the 26th Academic Council Meeting.	-
27.03 To review and ratify the Semester End Examination results of the examinations conducted after 26th Academic Council meeting. The Academic Council reviewed the Semester End Examination results (Regular & Supplementary) of B.Tech, results of Honor & Minor degree courses of B.Tech, M.Tech and MBA from April 2025 to September 2025 for the academic year 2024-25 and ratified.	The list of ratified results was submitted to the university for further processing
27.04 To review and ratify the list of eligible UG-B.Tech under the R17 & R20 Regulations and & PG-MBA students for the award of degree. The Academic Council reviewed and approved the eligible students for the award of PG-MBA Provisional Certificates - Class of 2025 for the academic year 2024-25. Also, approved the eligible students for graduation qualified in supplementary examinations of UG-B.Tech program.	Provisional Certificates were issued to all eligible students after verification by the university, and the PC data was submitted to the university for the issuance of original degrees.
27.05 Any other item with the permission of the Chair. **Prof. M.H.M. Krishna Prasad**, Director, Academics, made recommendations on providing additional guidance to students enrolled in Minors and Honors programs under the R23 Regulations. This suggestion follows the observation that a significant number of students had discontinued these programs under the R20 Regulations. Principal presented the guidelines of AICTE and UGC on "Adjunct Faculty and Professor(s) of Practice". He communicated members of the Academic Council about the inclination of college to recruit one adjunct faculty and one Professor / Associate Professor / Assistant Professor of Practice in each discipline. He told the Academic Committee that this point will be thoroughly discussed in the IQAC meeting scheduled on 20-09-2025 and will present the status of recruitment of faculty in the next Academic Council meeting. **Prof. M.H.M. Krishna Prasad**, Director, Academics shared the information about the nomination of **Dr.B.Karuna Kumar**, Principal, SRGEC as a member on the **Academic Standing Committee of JNTUK Kakinada**. The members of Academic Council congratulated Prof. B. Karuna Kumar on his nomination. Dr. B. Karuna Kumar thanked the members for their wishes.	--

28.03 To review and ratify the course structure & Syllabi of UG–B.Tech 3rd Year for R23 Regulations for the academic year 2025-26.

The Member Secretary presented the course structure and syllabi of UG–B.Tech Program 3rd Year (R23 Regulations) for the academic year 2025-26 recommended by the Board of Studies of various departments.

Resolution: The Academic Council discussed and approved the course structures and Syllabi offered in R23 Regulations of III Year B.Tech. The approved Course Structure is given as ***Annexure – I*** (See page No. 7).

28.04 To review and ratify the course structure & Syllabi of PG–MBA 3rd & 4th Semesters (R24 Regulations) for the academic year 2025-26.

The Member Secretary presented the course structure and syllabi of PG–MBA Program 3rd and 4th Semesters (R24 Regulations) for the academic year 2025-26 recommended by the Board of Studies of MBA department.

Resolution: The Academic Council discussed and approved the course structures and Syllabi offered in R24 Regulations of 3rd & 4th Semesters for MBA. The approved Course Structure is given as ***Annexure – II*** (See page No. 16).

28.05 To review and ratify the course structure & Syllabi of PG–M.Tech program for R25 Regulations effective from the academic year 2025-26.

The Member Secretary presented the course structure and syllabi of PG–M.TEch Program (R25 Regulations) effective from the academic year 2025-26 recommended by the Board of Studies of various departments.

Resolution: The Academic Council discussed and approved the course structures and Syllabi (R25 Regulations) effective from the academic year 2025-26. The approved Course Structure is given as ***Annexure – III*** (See page No. 18).

28.06 To ratify the appointments of Adjunct Faculty, Professor of Practice, Associate Professor of Practice and Assistant Professor of Practice for the academic year 2025-26.

The principal presented the appointments of Adjunct Faculty, Professor of Practice, Associate Professor of Practice and Assistant Professor of Practice for the academic year 2025-26 for ratification. The members approved the following appointments.

I) Adjunct Faculty

Sl. No.	Department	Course	Name of the Adjunct Faculty
1	Electrical and Electronics Engineering	DC Machines and Transformers (II Year B.Tech) Switch Gear and Protection (III Year B.Tech)	**Mr. M. Durga Prasad** Retd. CE, APSEB, H.No. 74-30-2A, Ashok Nagar, Vijayawada
2	Computer Science and Engineering	Big Data Analytics (R20) (IV Year B.Tech) Machine Learning (R23) (III Year B.Tech)	**Sri Veer Anjaneya Raju Nagaraju** Bigdata Consultant, and Coach and CEO of Tekcrux Private Limited Hyderabad
3	Information Technology	Big Data Analytics (R20) (IV Year B.Tech) Cloud Computing (R23) (III Year B.Tech)	**Sri Veer Anjaneya Raju Nagaraju** Bigdata Consultant, and Coach and CEO of Tekcrux Private Limited Hyderabad

Sl. No.	Department	Course	Name of the Adjunct Faculty
4	Artificial Intelligence and Data Science	Data Warehousing and Data Mining (R23) (III Year B.Tech) Big Data Analytics (R23) (III Year B.Tech)	**Mr. Naga Sai Krishna Pamidikondala** Cloud Solution Architect, Microsoft Corporation India Pvt. Ltd., Bangalore
5	CSE(Artificial Intelligence and Machine Learning)	Cloud Computing (R23) (III Year B.Tech) NoSQL Databases (III Year B.Tech)	**Mr. Naga Sai Krishna Pamidikondala** Cloud Solution Architect, Microsoft Corporation India Pvt. Ltd., Bangalore
6	Internet of Things	Internet of Things and Its Applications (R23) (III Year B.Tech) Industrial IoT (R23) (III Year B.Tech)	**Mr. Anirban Chowdhary** Engineering Manager, Zimplistic India Pvt. Ltd. Plot No. 270, Phase II, Udyag Vihar, Gurgaon

II) Professor of Practice / Associate Professor of Practice /Assistant Professor of Practice

Sl. No.	Department	Honour	Name of the Faculty
1	Civil Engineering	Honorary Professor of Practice	**Sri Ravi Prasad VV SS Palakodeti** Ministry of Road Transport and Highways, Government of India
2	Electrical and Electronics Engineering	Honorary Professor of Practice	**Captain D.S. Rao** Group Captain of Indian Air Force (Retired), Hyderabad
3	Mechanical Engineering	Honorary Assistant Professor of Practice	**Er. T. P. Sameer Kumar** Sr. Manager, SAIL, Jamshedpur
4	Electronics and Communication Engineering	Honorary Professor of Practice	**Sri M. John Chrisostom** Senior General Manager(Operations) Bharat Sanchar Nigam Ltd, Vijayawada
5	Computer Science and Engineering	Honorary Professor of Practice	**Mr. Ravi Mandala** Principal Software Engineer, Mobile & AI Platforms, Inuit Technology Pvt Ltd, Hyderabad.
6	Information Technology	Honorary Associate Professor of Practice	**Mr. G. Suresh Babu** Technical Lead HCL Technologies, Hyderabad
7	Artificial Intelligence and Data Science	Honorary Associate Professor of Practice	**Mr. Venkata Swamy Bathina** Senior Consultant, Oracle India Private Ltd, Madhapur, Hyderabad
8	CSE(Artificial Intelligence and Machine Learning)	Honorary Assistant Professor of Practice	**Ms. Tanuja Kalyani Methuku** Quality Engineer – Full Stack IBM, Bangalore.
9	Internet of Things	Honorary Associate Professor of Practice	**Sri Anil Kumar Burra** Director of Global Technical Business Development Intelligent memory EMEA GmbH, Bremen, Germany.

28.07 Any other item with the permission of the Chair.

Prof. D V L N Somayajulu highlighted recent NBA regulations treating allied specializations (CSE(AI&ML), AI&DS, etc.) as a single cluster and stressed the need to maintain the prescribed faculty–student ratio and faculty composition.

Prof. Somayajulu advised for optimal utilization of adjunct faculty and Professors of Practice for preparing quality research proposals to funding agencies such as ANRF and DRDO.

The Principal informed that an AR&DB project proposal has been submitted to DRDO; the presentation is completed and revisions are underway based on expert feedback.

Prof. Somayajulu briefed the committee on the Prime Minister Professorship/PMRF scheme and encouraged the institution to identify suitable candidates.

The Principal reported the effective utilization of the AICTE QIP PG Certification Programme in the college, with 65 faculty members successfully completing the programme.

Prof. Lal Kishore enquired about the faculty research publications. The Principal stated that the output is satisfactory and will be reviewed in detail in the next Academic Council meeting.

Prof. Somayajulu emphasized on working meticulously for obtaining NIRF Ranking.

Prof. Somayajulu proposed to conduct next Academic Council meeting in offline mode and other members seconded the opinion of him.

Annexure - I

Course Structure & Syllabi of UG–B.Tech - III Year (R23 Regulations)

I) Civil Engineering

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CE4518	Design and Drawing of Reinforced Concrete Structures**	3	0	0	3
2	CE4519	Engineering Hydrology	3	0	0	3
3	CE4520	Soil Mechanics	3	0	0	3
4	-	**Professional Elective – I**	3	0	0	3
5	-	**Open Elective – I**	3	0	0	3
6	CE4527	Geotechnical Engineering lab	0	0	3	1.5
7	CE4528	Fluid Mechanics & Hydraulic Machines Lab	0	0	3	1.5
8	EE4518	Tinkering Lab	0	0	2	1
9	CE4529	Skills on Civil Engineering software (CAD & Revit)	0	1	2	2
10	CE4530	Community Service Internship	-	-	4	2
		Total :	**15**	**1**	**14**	**23**

** Project Based Theory Course

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CE4531	Foundation Engineering	3	0	0	3
2	CE4532	Highway Engineering	3	0	0	3
3	CE4533	Environmental Engineering	3	0	0	3
4	-	**Professional Elective – II**	3	0	0	3
5	-	**Professional Elective – III**	3	0	0	3
6	-	**Open Elective – II**	3	0	0	3
7	CE4543	Highway Engineering Lab	0	0	3	1.5
8	CE4544	Environmental Engineering Lab	0	0	3	1.5
9	EG4503	Soft Skills	0	1	2	2
10	EG4504	Technical Paper Writing and IPR	2	0	0	-
		Total :	**19**	**1**	**8**	**23**

Electives

Professional Elective – I
- CE4521 Advanced Structural Analysis
- CE4522 Ground Improvement Techniques
- CE4523 Construction Technology and Management
- CE4524 Advanced Surveying Techniques
- MOOCs

Professional Elective – II
- CE4534 Finite Element Analysis
- CE4535 Structural Repair and Rehabilitation Techniques
- CE4536 Water Resources Engineering
- DM4503 Artificial Intelligence and Machine Learning
- MOOCs

Professional Elective – III
- CE4537 Air Pollution and Control
- CE4538 Project Economics and Financial Analysis
- CE4539 Railways, Airports and Harbour Engineering
- CE4540 Disaster Preparedness, Planning and Management
- MOOCs

Open Elective – I
- CE4525 Green Buildings
- CE4526 Climate Change Impact on Eco-System

Open Elective – II
- CE4541 Disaster Management
- CE4542 Sustainability in Engineering Practices

II) Electrical and Electronics Engineering

III Year I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Hours per week			Total Credits
			L	T	P	
1	EE4519	Power Electronics	3	0	0	3
2	EC4521	Digital Circuits	3	0	0	3
3	EE4520	Power Systems-II	3	0	0	3
4		**Professional Elective - I**	3	0	0	3
5		**Open Elective - I**	3	0	0	3
6	EE4525	Power Electronics Lab	0	0	3	1.5
7	EC4524	Analog and Digital Circuits Lab	0	0	3	1.5
8	EE4518	Tinkering Lab	0	0	2	1
9	EE4526	IoT Applications of Electrical Engineering Lab	0	1	2	2
10	EE4527	Community Service Internship	0	0	4	2
		Total :	**15**	**1**	**14**	**23**

III Year II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Hours per week			Total Credits
			L	T	P	
1	EE4528	Electrical Measurements and Instrumentation	3	0	0	3
2	EC4539	Microprocessors and Microcontrollers	3	0	0	3
3	EE4529	Power System Analysis	3	0	0	3
4		**Professional Elective - II**	3	0	0	3
5		**Professional Elective - III**	3	0	0	3
6		**Open Elective – II**	3	0	0	3
7	EE4536	Electrical Measurements and Instrumentation Lab	0	0	3	1.5
8	EC4542	Microprocessors and Microcontrollers Lab	0	0	3	1.5
9	EG4503	Soft Skills	0	1	2	2
10	BA4504	Research Methodology and IPR	2	0	0	--
		Total :	**20**	**1**	**8**	**23**
Mandatory Industry Internship of 08 weeks duration during summer vacation.						

Electives

Professional Elective – I EC4522 Computer Organization and Architecture EC4523 Fundamentals of Signals and Systems EE4521 Advanced Control Systems EE4522 Estimation and Cost Analysis of Electrical Installations MOOCs	**Professional Elective – III** EE4532 High Voltage Engineering EC4541 Fundamentals of Digital Signal Processing EE4533 Electric Drives DM4505 Fundamentals of Machine Learning MOOCs
Professional Elective – II EE4530 Switchgear and Protection EC4540 Communication Systems EE4531 Renewable and Distributed Energy Technologies DM4504 Fundamentals of Artificial Intelligence MOOCs	**Open Elective – I** EE4523 Electrical Materials EE4524 Electrical Safety Management **Open Elective – II** EE4534 Fundamentals of Electrical Machines EE4535 Fundamentals of Electric Vehicles

III) Mechanical Engineering

III B.Tech - I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	ME4514	Machine Tools and Metrology	3	-	-	3
2	ME4515	Thermal Engineering	3	-	-	3
3	ME4516	Design of Machine Elements	3	-	-	3
4		**Professional Elective – I**	3	-	-	3
5		**Open Elective – I**	3	-	-	3
6	ME4523	Machine tools and Metrology Lab	-	-	4	2
7	ME4524	Thermal Engineering Lab	-	-	3	1.5
8	ME4525	Theory of Machines Lab	-	-	3	1.5
9	EE4518	Tinkering Lab	-	-	2	1
10	ME4526	Community Service Internship	-	-	4	2
		Total :	**15**	**-**	**14**	**23**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	ME4527	Heat Transfer	3	-	-	3
2	DM4503	Artificial Intelligence and Machine Learning	3	-	-	3
3	ME4528	Finite Element Methods	3	-	-	3
4	-	**Professional Elective – II**	3	-	-	3
5	-	**Professional Elective – III**	3	-	-	3
6	-	**Open Elective – II**	3	-	-	3
7	ME4539	Heat Transfer Lab	-	-	3	1.5
8	DM4507	Artificial Intelligence and Machine Learning Lab	-	-	3	1.5
9	ME4540	Robotics and Drone Technologies Lab	-	-	4	2
10	EG4504	Technical Paper Writing and IPR	2	-	-	-
		Total :	**20**	**-**	**10**	**23**

Electives

Professional Elective – I
ME4517 Design for Manufacturing
ME4518 Conventional and Futuristic Vehicle Technology
ME4519 Renewable Energy Technologies
ME4520 Industrial Hydraulics and Pneumatics
MOOCs

Professional Elective – II
ME4529 Advanced Manufacturing Processes
ME4530 Non-Destructive Testing
ME4531 Micro Electro Mechanical Systems
ME4532 Sensors and Instrumentation
MOOCs

Professional Elective – III
ME4533 Energy Storage Technologies
ME4534 Industrial Robotics
ME4535 Mechatronics
ME4536 Advanced Material Science
MOOCs

Open Elective – I
ME4521 Principles of Sustainable Energy Technologies
ME4522 Additive Manufacturing

Open Elective – II
ME4537 Green Engineering
ME4538 Non-Destructive Evaluation
MOOCs

IV) Electronics and Communication Engineering

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EC4526	Analog and Digital IC Applications	3	-	-	3
2	EC4527	Digital Communications	3	-	-	3
3	EC4528	Antennas and Wave Propagation	3	-	-	3
4		**Professional Elective – I**	3	-	-	3
5		**Open Elective – I**	3	-	-	3
6	EC4535	Analog and Digital IC Applications Lab	-	-	3	1.5
7	EC4536	Analog and Digital Communications Lab	-	-	3	1.5
8	EC4537	Applications of Lab view for Instrumentation and Communications	-	1	2	2
9	EC4538	Community Service Internship	-	-	4	2
		Total :	**15**	**1**	**12**	**22**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EC4543	VLSI Design	3	-	-	3
2	EC4544	Microprocessors and Microcontrollers Interfacing	3	-	-	3
3	EC4545	Digital Signal Processing	3	-	-	3
4		**Professional Elective – II**	3	-	-	3
5		**Professional Elective – III**	3	-	-	3
6		**Open Elective – II**	3	-	-	3
7	EC4554	VLSI Design Lab	-	-	3	1.5
8	EC4555	Microprocessors and Microcontrollers Interfacing Lab	-	-	3	1.5
9	EC4556	Antennas Lab	-	-	2	1
10	DM4508	Machine Learning using Python	-	1	2	2
11	BA4504	Research Methodology and IPR	2	-	-	-
		Total :	**20**	**1**	**10**	**24**

Electives

Professional Elective – I
- EC4529 Digital System Design through HDL
- EC4530 Optical Communications
- EC4531 Principles of Electronic Measurements and Instrumentation
- EC4522 Computer Organization and Architecture
- MOOCs

Professional Elective – II
- EC4546 Analog IC Design
- EC4547 Satellite Communications
- EC4548 Smart and Wireless Instrumentation
- DM4504 Fundamentals of Artificial Intelligence
- MOOCs

Professional Elective – III
- EC4549 Bio Medical Instrumentation
- EC4550 Microwave Engineering
- EC4551 Embedded Systems
- DM4505 Fundamentals of Machine Learning
- MOOCs

Open Elective – I
- EC4532 Electronic Devices and Applications
- EC4533 Introduction to Signals and Systems
- EC4534 Probability Theory and Random Variables
- MOOCs

Open Elective – II
- EC4552 Principles of Communications
- EC4553 Introduction to Microprocessors & Microcontrollers
- MOOCs

V) Computer Science and Engineering

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CT4523	Data Warehousing and Data Mining	3	-	-	3
2	CT4524	Computer Networks	3	-	-	3
3	CS4502	Formal Languages and Automata Theory	3	-	-	3
4		**Professional Elective – I**	3	-	-	3
5		**Open Elective – I**	3	-	-	3
6	CS4505	Data Mining Lab	-	-	3	1.5
7	CT4531	Computer Networks Lab	-	-	3	1.5
8	EG4503	Soft Skills	-	1	2	2
9	CT4532	User Interface Design using Flutter	-	-	2	1
10	CS4506	Community Service Internship	-	-	4	2
		Total :	**5**	**1**	**14**	**23**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CS4507	Compiler Design	3	-	-	3
2	CT4530	Cloud Computing	3	-	-	3
3	CT4535	Cryptography and Network Security	3	-	-	3
4	-	**Professional Elective – II**	3	-	-	3
5	-	**Professional Elective – III**	3	-	-	3
6	-	**Open Elective – II**	3	-	-	3
7	CT4545	Cloud Computing Lab	-	-	3	1.5
8	CS4510	Cryptography and Network Security Lab	-	-	3	1.5
9	CT4533	Full Stack Development – 2	-	1	2	2
10	EG4504	Technical Paper Writing and IPR	2	-	-	-
		Total :	**20**	**1**	**8**	**23**

Electives

Professional Elective – I
- CT4516 Artificial Intelligence
- CT4526 Object Oriented Analysis and Design
- CT4527 Distributed Operating Systems
- CT4528 Software Project Management
- MOOCs

Professional Elective – II
- CT4529 Cyber Security
- CT4539 Software Testing Methodologies
- CT4540 Devops
- AM4501 Machine Learning
- MOOCs

Professional Elective – III
- CT4536 Natural Language Processing
- CT4538 Principles of Big Data Analytics
- CT4543 Quantum Computing
- CT4544 Mobile Ad Hoc Networks
- MOOCs

Open Elective – I
- CS4503 Fundamentals of Data Structures
- CS4504 Ethical Hacking
- MOOCs

Open Elective – II
- CS4508 Fundamentals of Java Programming
- CS4509 Scripting Languages
- MOOCs

VI) Information Technology

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	IT4503	Advanced Java	3	-	-	3
2	CT4524	Computer Networks	3	-	-	3
3	CT4525	Automata Theory and Compiler Design	3	-	-	3
4		**Professional Elective – I**	3	-	-	3
5		**Open Elective – I**	3	-	-	3
6	IT4506	Advanced Java Lab	-	-	3	1.5
7	CT4531	Computer Networks Lab	-	-	3	1.5
8	CT4532	Soft Skills	-	1	2	2
9	EG4503	User Interface Design using Flutter	-	-	2	1
10	IT4507	Community Service Internship	-	-	4	2
		Total :	**15**	**1**	**14**	**23**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CT4530	Cloud Computing	3	-	-	3
2	CT4535	Cryptography and Network Security	3	-	-	3
3	AM4501	Machine Learning	3	-	-	3
4	-	**Professional Elective – II**	3	-	-	3
5	-	**Professional Elective – III**	3	-	-	3
6	-	**Open Elective – II**	3	-	-	3
7	CT4545	Cloud Computing Lab	-	-	3	1.5
8	AM4502	Machine Learning Lab	-	-	3	1.5
9	CT4521	Full Stack Development – 1	-	1	2	2
10	EG4504	Technical Paper Writing and IPR	2	-	-	-
		Total :	**0**	**1**	**8**	**23**

Electives

Professional Elective – I
- CT4516 Artificial Intelligence
- CT4523 Data Warehousing and Data Mining
- CT4526 Object Oriented Analysis and Design
- CT4529 Cyber Security
- MOOCs

Professional Elective – II
- CT4534 Augmented Reality and Virtual Reality
- CT4539 Software Testing Methodologies
- CT4540 Devops
- CT4541 Generative AI
- MOOCs

Professional Elective – III
- CT4527 Distributed Operating Systems
- CT4528 Software Project Management
- CT4536 Natural Language Processing
- CT4544 Mobile Ad Hoc Networks
- MOOCs

Open Elective – I
- IT4504 Principles of Operating Systems
- IT4505 Free and Open Source Software
- MOOCs

Open Elective – II
- IT4508 M-Commerce
- IT4509 Web Technologies
- MOOCs

VII) CSE (Artificial Intelligence and Machine Learning)

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	AM4503	Information Retrieval Systems	3	-	-	3
2	CT4518	Operating Systems	3	-	-	3
3	CT4524	Computer Networks	3	-	-	3
4		**Professional Elective – I**	3	-	-	3
5		**Open Elective – I**	3	-	-	3
6	AM4506	Information Retrieval Lab	-	-	3	1.5
7	CT4531	Computer Networks Lab	-	-	3	1.5
8	CT4533	Full Stack Development – 2	-	1	2	2
9	CT4532	User Interface Design using Flutter	-	-	2	1
10	AM4507	Community Service Internship	-	-	4	2
		Total :	**15**	**1**	**14**	**23**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CT4536	Natural Language Processing	3	-	-	3
2	CT4537	Deep Learning	3	-	-	3
3	DM4501	Data Visualization	3	-	-	3
4		**Professional Elective – II**	3	-	-	3
5		**Professional Elective – III**	3	-	-	3
6		**Open Elective – II**	3	-	-	3
7	AM4512	Deep Learning Lab	-	-	3	1.5
8	DM4502	Data Visualization Lab	-	-	3	1.5
9	EG4503	Soft Skills	-	1	2	2
10	EG4504	Technical Paper Writing and IPR	2	-	-	-
		Total :	**20**	**1**	**8**	**23**

Electives

Professional Elective – I
- CT4519 Software Engineering
- CT4525 Automata Theory and Compiler Design
- CT4530 Cloud Computing
- IN4505 Internet of Things
- MOOCs

Professional Elective – II
- CT4535 Cryptography and Network Security
- CT4539 Software Testing Methodologies
- CT4540 DevOps
- AM4508 Recommender Systems
- MOOCs

Professional Elective – III
- CT4528 Software Project Management
- CT4542 Computer Vision
- AM4509 Mobile Ad Hoc and Sensor Networks
- DM4510 NoSQL Databases
- MOOCs

Open Elective – I
- AM4504 Introduction to Cloud Computing
- AM4505 Principles of Information Retrieval Systems
- MOOCs

Open Elective – II
- AM4510 Fundamentals of Deep Learning
- AM4511 Principles of Cyber Security
- MOOCs

VIII) Artificial Intelligence and Data Science

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CT4523	Data Warehousing and Data Mining	3	-	-	3
2	AD4505	Principles of Machine Learning	3	-	-	3
3	DM4501	Data Visualization	3	-	-	3
4		**Professional Elective – I**	3	-	-	3
5		**Open Elective – I**	3	-	-	3
6	AD4510	Data Warehousing and Machine Learning Lab	-	-	3	1.5
7	DM4502	Data Visualization Lab	-	-	3	1.5
8	EG4503	Soft skills	-	1	2	2
9	CT4532	User Interface Design using Flutter	-	-	2	1
10	AD4511	Community Service Internship	-	-	4	2
		Total :	**15**	**1**	**14**	**23**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	DM4509	Big Data Analytics	3	-	-	3
2	CT4536	Natural Language Processing	3	-	-	3
3	CT4537	Deep Learning	3	-	-	3
4		**Professional Elective – II**	3	-	-	3
5		**Professional Elective – III**	3	-	-	3
6		**Open Elective – II**	3	-	-	3
7	AD4515	Big Data Analytics Lab	-	-	3	1.5
8	AD4516	Deep Learning and Natural Language Processing Lab	-	-	3	1.5
9	CT4533	Full Stack Development – 2	-	1	2	2
10	EG4504	Technical Paper Writing and IPR	2	-	-	-
		Total :	**15**	**1**	**10**	**23**

Electives

Professional Elective – I
- CT4526 Object Oriented Analysis and Design
- IN4505 Internet of Things
- AD4506 Soft Computing
- AD4507 Exploratory Data Analysis with Python
- MOOCs

Professional Elective – II
- CT4518 Operating Systems
- CT4525 Automata Theory and Complier Design
- CT4535 Cryptography and Network Security
- CT4542 Computer Vision
- MOOCs

Professional Elective – III
- CT4530 Cloud Computing
- CT4543 Quantum Computing
- DM4510 NoSQL Databases
- AD4512 Social Media Analytics
- MOOCs

Open Elective – I
- AD4508 Fundamentals of Database Management Systems
- AD4509 Foundations of Exploratory Data Analysis
- MOOCs

Open Elective – II
- AD4513 Foundations of NoSQL Databases
- AD4514 Fundamentals of Data Science
- MOOCs

IX) Internet of Things

III Year I Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	IN4506	Microprocessors, Microcontrollers and Applications	3	-	-	3
2	IN4507	Fundamentals of Control Systems	3	-	-	3
3	BA4502	Human Resources and Project Management	2	-	-	2
4	IN4508	Internet of Things and its Applications **	2	-	2	3
5		**Professional Elective – I**	3	-	-	3
6		**Open Elective – I**	3	-	-	3
7	IN4514	Microprocessors, Microcontrollers and Applications Lab	-	-	2	1
8	IN4515	Internet of Things and its Applications Lab	-	-	2	1
9	CT4522	JAVA Programming	-	1	2	2
10	IN4516	Community Service Internship	-	-	4	2
		Total :	**16**	**1**	**12**	**23**

** **Project based theory course**

III Year II Semester

Sl. No.	Course Code	Name of Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	IN4517	Data Communication and Computer Networks	3	-	-	3
2	DM4505	Fundamentals of Machine Learning	3	-	-	3
3	IN4518	IoT System Design	3	-	-	3
4		**Professional Elective – II**	3	-	-	3
5		**Professional Elective – III**	3	-	-	3
6		**Open Elective – II**	3	-	-	3
7	IN4527	Data Communication and Computer Networks Lab	-	-	2	1.5
8	DM4511	Fundamentals of Machine Learning Lab	-	-	2	1.5
9	EG4503	Soft Skills	-	1	2	2
10	EG4504	Technical Paper Writing and IPR	2	-	-	-
		Total :	**20**	**1**	**6**	**23**

Electives

Professional Elective – I

EC4525 Introduction to Digital Signal Processing
IN4509 Raspberry Pi Programming for IoT
IN4510 Operating Systems for IoT
IN4511 Smart Sensor Technologies
MOOCs

Professional Elective – II

DM4506 Image Processing and Computer Vision
IN4519 Real Time Systems
IN4520 Wearable Computing
IN4521 Industrial IoT
MOOCs

Professional Elective – III

CT4534 Augmented Reality & Virtual Reality
IN4522 Fog Computing
IN4523 Wireless Sensor Networks for IoT
IN4524 IoT Security
MOOCs

Open Elective – I

IN4512 Fundamentals of IoT
IN4513 Introduction to Sensor & Actuators
MOOCs

Open Elective – II

IN4525 Introduction to Smart Sensors
IN4526 Trends in IoT
MOOCs

Annexure – II

Course Structure & Syllabi of PG–MBA 3rd & 4th Semesters (R24 Regulations) for the academic year 2025-26

Course Structure

III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	BA4927	Strategic Management	4	–	–	4
2	BA4928	Operations Research	4	–	–	4
3		Specialization – I	4	–	–	3
4		Specialization – II	4	–	–	3
5		Specialization – III	4	–	–	3
6		Specialization – IV	4	–	–	3
7	BA4937	Entrepreneur Project–III Submission of project proposal report to Govt. bodies and applying the proposal to Govt. agencies like (START–UPS/ MSME/ NABARD/ IDBI/ SISI) and the same may be submitted to the University with the acknowledgement.	–	–	2	1
		Total	**24**	**–**	**2**	**21**

IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	BA4938	Corporate Legal Framework	4	–	–	4
2	BA4939	Supply Chain Management	4	–	–	4
3		Specialization – V	3	–	–	3
4		Specialization – VI	3	–	–	3
5		Specialization – VII	3	–	–	3
6		Specialization – VIII	3	–	–	3
7		Main project Submission and Viva–Voce		–	8	4
		Total :	**20**	**–**	**8**	**24**

L: Lecture T: Tutorial P : Practical

Note:

- The students opting for dual specialization must select Elective 1 and 2 from first specialization and 3 and 4 from second specialization in III semester.
- The students opting for dual specialization must select Elective 5and 6 from first specialization and 7and 8 from second specialization in IV semester.

Specialization

III Semester		IV Semester	
Course Code	**Name of the Course**	**Course Code**	**Name of the Course**
Marketing			
BA4929	Consumer Behavior	BA4940	Green Marketing
BA4930	Retail Management	BA4941	Services Marketing
Finance			
BA4931	Investment and Portfolio Management	BA4942	International Trade and Finance
BA4932	Banking institutions and financial reforms	BA4943	Financial Derivatives
Human Resource Management			
BA4933	Performance and Compensation Management	BA4944	Labor Welfare and Employment laws
BA4934	Talent Acquisition and Management	BA4945	International Human Resource Management
Business Analytics			
BA4935	Text, Social Media & Web Analytics	BA4946	Business Intelligence and Data Visualization
BA4936	Marketing Analytics	BA4947	HR Analytics

Annexure – III

Course Structure & Syllabi of PG–M.Tech (R25 Regulations) effective from the academic year 2025-26

I) Structural Engineering (CE)

First Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Theory of Elasticity	3	1	-	4
2	Structural Dynamics	3	1	-	4
3	Matrix Analysis of Structure	3	1	-	4
4	**Program Elective – I** i) Experimental Stress Analysis ii) Analytical & Numerical Methods for Structural Engineering iii) Design of Reinforced Concrete Foundation iv) Structural Optimization	3	-	-	3
5	**Program Elective – II** i) Bridge Engineering ii) Repair and Rehabilitation of Structures iii) Advanced Reinforced Concrete Design iv) Fracture Mechanics	3	-	-	3
6	Advanced Concrete Technology Laboratory	-	1	2	2
7	Advanced Structural Engineering Laboratory	-	1	2	2
8	Seminar – 1	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Second Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Finite Element Methods in Structural Engineering	3	1	-	4
2	Earthquake Resistant Design	3	1	-	4
3	Stability of Structures	3	1	-	4
4	**Program Elective – III** i) Analysis of Tall Structures ii) Advanced Steel Design iii) Analysis of Offshore Structures iv) Structural Health Monitoring	3	-	-	3
5	**Program Elective – IV** i) Theory of Plates and Shells ii) Precast and Prefabricated Structures iii) Earth Retaining Structures iv) Industrial Structures	3	-	-	3
6	Computer Aided Design Laboratory	-	1	2	2
7	Structural Design Laboratory	-	1	2	2
8	Seminar – II	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Third Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Research methodology and IPR (Swayam 12 Week MOOC Course)	3	-	-	3
2	Summer Internship / Industrial training **	-	-	-	3
3	Comprehensive Viva ***	-	-	-	2
4	Dissertation Part – A ****	-	-	20	10
	Total Credits :	**3**	**-**	**20**	**18**

* Student Attended Summer/ Year Break and Assessment will be done in 3rd Semester

** Comprehensive viva can be conducted courses completing upto Second Semester

*** Dissertation –Part A, Internal Assessment

Fourth Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Project / Dissertation Part – B ****	-	-	32	16
	Total Credits :	**-**	**-**	**32**	**16**

**** External Assessment

II) Power Electronics and Electric Drives (EEE)

First Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Electrical Machine Modelling and Analysis	3	1	-	4
2	Power Electronic Converters	3	1	-	4
3	Electric Vehicles	3	1	-	4
4	**Program Elective – I** i) Modern Control Theory ii) Power Quality Enhancement using Custom Power Devices iii) Industrial Control Electronics iv) Programmable Logic Controllers and Applications	3	-	-	3
5	**Program Elective – II** i) Artificial Intelligence Techniques ii) Renewable Energy Technologies iii) HVDC Transmission and Flexible AC Transmission Systems iv) Special Electrical Machines	3	-	-	3
6	Power Converters Simulation Laboratory	-	1	2	2
7	Power Converters Laboratory	-	1	2	2
8	Seminar – I	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Second Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Switched Mode Power Conversion	3	1	-	4
2	Power Electronic Control of Electrical Drives	3	1	-	4
3	Digital Controllers for Power Electronic Applications	3	1	-	4
4	**Program Elective – III** i) Control & Integration of Renewable Energy Systems ii) Digital Control Systems iii) Battery Management Systems and Charging Stations iv) Industrial Applications of Power Electronic Converters	3	-	-	3
5	**Program Elective – IV** i) Advanced Digital Signal Processing ii) Applications of Power Converters iii) Industrial Internet of Things iv) Smart Grid Technologies	3	-	-	3
6	Electric Drives Simulation Laboratory	-	1	2	2
7	Digital Controllers and Electric Drives Laboratory	-	1	2	2
8	Seminar – II	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Third Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Research methodology and IPR (Swayam 12 Week MOOC Course)	3	-	-	3
2	Summer Internship / Industrial training **	-	-	-	3
3	Comprehensive Viva ***	-	-	-	2
4	Dissertation Part – A ****	-	-	20	10
	Total Credits :	**3**	**-**	**20**	**18**

* Student Attended Summer/ Year Break and Assessment will be done in 3rd Semester

** Comprehensive viva can be conducted courses completing upto Second Semester

*** Dissertation –Part A, Internal Assessment

Fourth Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Project / Dissertation Part – B ****	-	-	32	16
	Total Credits :	**-**	**-**	**32**	**16**

**** External Assessment

III) Machine Design (ME)

First Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Mechanical Vibrations and Acoustics	3	1	-	4
2	Advanced Mechanics of Solids	3	1	-	4
3	AI&ML for Mechanical Engineering	3	1	-	4
4	**Program Elective – I** i) Advanced Finite Element Methods ii) Product Design and Development iii) Geometric Modeling iv) Numerical Methods for Mechanical Engineering	3	-	-	3
5	**Program Elective – II** i) Design for Manufacturing and Assembly ii) Multi Body Dynamics iii) Vision Systems and Image Processing iv) Engineering Tribology	3	-	-	3
6	Machine Dynamics Lab	-	1	2	2
7	Design Practice Lab – I	-	1	2	2
8	Seminar – I	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Second Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Advanced Mechanisms and Robotics	3	1	-	4
2	Advanced Machine Design	3	1	-	4
3	Signal Analysis and Condition Monitoring	3	1	-	4
4	**Program Elective – III** i) Theory of Plasticity ii) Advanced Optimization Techniques iii) Computational Fluid Dynamics iv) Mechanics of Composite Materials	3	-	-	3
5	**Program Elective – IV** i) Experimental Stress Analysis ii) Fracture Mechanics iii) Mechatronics iv) Introduction to Quantum Technologies	3	-	-	3
6	Computational Mathematics Lab	-	1	2	2
7	Design Practice Lab – II	-	1	2	2
8	Seminar – II	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Third Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Research methodology and IPR (Swayam 12 Week MOOC Course)	3	-	-	3
2	Summer Internship / Industrial training **	-	-	-	3
3	Comprehensive Viva ***	-	-	-	2
4	Dissertation Part – A ****	-	-	20	10
	Total Credits :	**3**	**-**	**20**	**18**

* Student Attended Summer/ Year Break and Assessment will be done in 3rd Semester

** Comprehensive viva can be conducted courses completing upto Second Semester

*** Dissertation –Part A, Internal Assessment

Fourth Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Project / Dissertation Part – B ****	-	-	32	16
	Total Credits :	**-**	**-**	**32**	**16**

**** External Assessment

IV) VLSI Design and Embedded Systems (ECE)

First Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Advanced Digital System Design	3	1	-	4
2	Embedded Hardware Platforms and Programming	3	1	-	4
3	FPGA Design	3	1	-	4
4	**Program Elective – I** i) Scripting Languages for VLSI ii) VLSI Architectures iii) Geometric Modeling iv) Analog CMOS VLSI Design	3	-	-	3
5	**Program Elective – II** i) System on Chip Design ii) Embedded System Design using FPGA iii) Edge Computing iv) Cryptography and Network Security	3	-	-	3
6	Advanced Digital System Design Lab	-	1	2	2
7	Embedded Systems Lab	-	1	2	2
8	Seminar – 1	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Second Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Digital CMOS Circuit Design	3	1	-	4
2	Architectures for DSP	3	1	-	4
3	Embedded Real Time Operating Systems	3	1	-	4
4	**Program Elective – III** i) VLSI Signal Processing ii) Advanced VLSI Interconnects iii) Quantum Computing iv) VLSI Testing and Testability	3	-	-	3
5	**Program Elective – IV** i) System Design using Embedded Processors ii) Internet of Things iii) System Design with Embedded Linux iv) Embedded Network and Protocols	3	-	-	3
6	Digital CMOS Circuit Design Lab	-	1	2	2
7	Advanced Digital Signal Processing Lab	-	1	2	2
8	Seminar – II	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Third Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Research methodology and IPR (Swayam 12 Week MOOC Course)	3	-	-	3
2	Summer Internship / Industrial training **	-	-	-	3
3	Comprehensive Viva ***	-	-	-	2
4	Dissertation Part – A ****	-	-	20	10
	Total Credits :	**3**	**-**	**20**	**18**

* Student Attended Summer/ Year Break and Assessment will be done in 3rd Semester

** Comprehensive viva can be conducted courses completing upto Second Semester

*** Dissertation –Part A, Internal Assessment

Fourth Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Project / Dissertation Part – B ****	-	-	32	16
	Total Credits :	**-**	**-**	**32**	**16**

**** External Assessment

V) CSE (Artificial Intelligence and Machine Learning) (CSE)

First Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Mathematics for Machine Learning	3	1	-	4
2	Artificial Intelligence	3	1	-	4
3	Data Science Applications	3	1	-	4
4	**Program Elective – I** i) Advanced data mining ii) Mining Massive Data Sets iii) High performance computing iv) Natural Language Processing	3	-	-	3
5	**Program Elective – II** i) Augmented Reality and Virtual Reality ii) Recommender Systems iii) Time Series Analysis iv) Robotic Process Automation	3	-	-	3
6	Artificial Intelligence Lab	-	1	2	2
7	Data Wrangling Lab	-	1	2	2
8	Seminar – I	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Second Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Machine Learning	3	1	-	4
2	Deep Learning	3	1	-	4
3	Advanced Data Structures and Algorithms	3	1	-	4
4	**Program Elective – III** i) Cloud Computing ii) Reinforcement Learning iii) Generative AI iv) Blockchain Technologies	3	-	-	3
5	**Program Elective – IV** i) Computer Vision ii) Quantum Computing iii) Soft Computing iv) Agentic AI	3	-	-	3
6	Deep Learning Lab	-	1	2	2
7	Machine Learning Lab	-	1	2	2
8	Seminar – II	-	-	2	1
	Total Credits :	**15**	**5**	**6**	**23**

Third Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Research methodology and IPR (Swayam 12 Week MOOC Course)	3	-	-	3
2	Summer Internship / Industrial training **	-	-	-	3
3	Comprehensive Viva ***	-	-	-	2
4	Dissertation Part – A ****	-	-	20	10
	Total Credits :	**3**	**-**	**20**	**18**

* Student Attended Summer/ Year Break and Assessment will be done in 3rd Semester

** Comprehensive viva can be conducted courses completing upto Second Semester

*** Dissertation –Part A, Internal Assessment

Fourth Semester

Sl. No.	Course Name	No. of Periods per week			No. of Credits
		L	T	P	
1	Project / Dissertation Part – B ****	-	-	32	16
	Total Credits :	**-**	**-**	**32**	**16**

**** External Assessment