Minutes of the 67th Meeting of the Academic Council held on 08th August 2022







Minutes of the 67th Meeting of the Academic Council

(08th August 2022 | 10.30 AM | Vellore Campus)

Members Present:

- 1. Dr. Rambabu Kodali, Vice-Chancellor, Chairperson
- 2. Dr. S. Narayanan, Pro-Vice Chancellor
- 3. Dr. V.S. Kanchana Bhaaskaran, Pro-Vice Chancellor
- 4. Dr. K. Giridhar, IIT Madras
- 5. Mr. Lakshminarayanan, Cognizant Digital Engineering Practice, Chennai
- 6. Shri. Jaji Vijayaraman, Valeo India Private Limited., Chennai
- 7. Mr. Lawrence Mohanraj, IBM India Pvt. Ltd, Chennai
- 8. Dr. M. Anthony Xavior, Dean Academics, Vellore Campus
- 9. Dr. A. Nayeemulla Khan, Dean Academics, Chennai Campus
- 10. Dr. R. Murugavel, Controller of Examination
- 11. Dr. N. Arunai Nambiraj, Dean, School of Advanced Sciences, Vellore Campus
- 12. Dr. R. Siva, Dean, School of Biosciences and Technology, Vellore Campus
- 13. Dr. L. Muruganandam, Dean, School of Chemical Engineering, Vellore Campus
- 14. Dr. Ramesh Babu K, Dean, School of Computer Science and Engineering, Vellore Campus
- 15. Dr. Mathew M. Noel, Dean, School of Electrical Engineering, Vellore Campus
- 16. Dr. S. Sivanantham, Dean, School of Electronics Engineering, Vellore Campus
- 17. Dr. S. Sumathy, Dean, School of Information Technology, Vellore Campus
- 18. Dr. K. Devendranath Ramkumar, Dean, School of Mechanical Engineering, Vellore Campus
- 19. Dr. M. Manoharan, Dean, School of Social Sciences and Languages, Vellore Campus
- 20. Dr. S. Babu, Dean, VIT Agricultural Innovations and Advanced Learning, Vellore Campus
- 21. Dr. Saleem Ahmed, Dean, VIT School of Design, Vellore Campus
- 22. Dr. A. Madhumathi, Director, School of Architecture, Vellore Campus
- 23. Dr. C.D. Naiju, Director, Students' Welfare, Vellore Campus
- 24. Dr. P. Arulmozhivarman, Dean, Academics Research, Vellore Campus
- 25. Dr. Suvojit Ganguly, Assistant Dean, School of Hotel and Tourism Management, Vellore Campus
- 26. Dr. V. Samuel Rajkumar, Director, Career Development Centre, Vellore Campus
- 27. Dr. G. Kalaichelvan, Director, UG Admissions, Vellore Campus
- 28. Dr. R. Ganesan, Dean, School of Computer Sciences and Engineering, Chennai Campus
- 29. Dr. Senthil Kumar N, Dean, School of Electrical Engineering, Chennai Campus
- 30. Dr. Susan Elias, Dean, School of Electronics Engineering, Chennai Campus
- 31. Dr. M.S. Soundara Pandian, Dean, VIT School of Law, Chennai Campus
- 32. Dr. Annamalai K, Dean, School of Mechanical Engineering, Chennai Campus
- 33. Dr. Hari Krishnan K, Dean, VIT Business School, Chennai Campus
- 34. Dr. S. Elavenil, Dean, School of Civil Engineering, Chennai Campus
- 35. Dr. Saradha Rajkumar, Dean, School of Social Sciences and Languages, Chennai Campus
- 36. Dr. D. Vasanth Kumar, HOD, VIT Fashion Institute of Technology, Chennai Campus
- 37. Dr. V. Viswanathan, Deputy Controller of Examinations, Chennai Campus
- 38. Dr. V. Thanikaiselvan, Associate Professor, School of Electronics Engineering, Vellore Campus
- 39. Dr. A. Raja Annamalai, Associate Professor, Centre for Innovative Manufacturing Research, Vellore Campus
- 40. Dr. (Ms.) T. Jayabarathi, Registrar, Member Secretary
- 41. Dr. M. Subaji, Director, VIT Online Learning Institute (VITOL), Vellore Campus (Special Invitee)

Leave of Absence:

- 1. Dr. N. Lalitha, Educational Consultant, Chennai
- 2. Dr. K.V.S. Hari, IISc, Bangalore
- 3. Mr. Arindam Sen, Bangalore, Alumni representative
- 4. Dr. A.S. Santhi, Dean, School of Civil Engineering, Vellore Campus

1 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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- 5. Dr. P.C. Sabumon, Dean, Academic Research, Chennai Campus
- 6. Dr. V. Ramasubramanian, Director, PG Admissions, Vellore Campus
- 7. Dr. S. Mahalakshmi, Dean, School of Advanced Sciences, Chennai Campus
- 8. Dr. G. Madhumitha, Assistant Professor, School of Advanced Sciences, Vellore Campus
- 9. Dr. Jagadish Mudiganti, Registrar, VIT-AP University, Special Invitee
- 10. Ms. Vrushali Deshmukh (19BCE0033) Student Council Member

Item 67/1	Welcome by Vice Chancellor									
	Vice Chancellor welcomed all the members of the Academic Council.									
Item 67/2	Remarks by Chancellor									
	 Honorable Chancellor congratulated faculty men making VIT ranked Ninth in the category of Universin NIRF Ranking 2022. 3 year Non-Engineering programmes needs more 37th Annual convocation will be on 18th of August Mr. R. N. Ravi will be the chief guest. 	rsity and Tenth	in the cat	tegory of	Research					
Item 67/3	To consider and confirm the Minutes of the 66 th meetin	g of the Acade	emic Cou	ıncil.						
	45				nexure 1)					
	Comments arising out of the minutes of the 66 th meeting	ng of the Acad	emic Cou	ıncil are	none.					
	The Academic Council confirmed the above minutes.									
Item 67/4	Action taken report on the minutes of 64 th Meeting of held on 16 th December 2021			(item no	. 64/42.3)					
	The minutes of 64 th Academic Council approved to combin	e the following	courses							
	Course Title	L	Т	Р	С					
	Basic Electrical Engineering	2	0	0	2					
	Basic Electrical Engineering Lab	0	0	2	1					
	Basic Electronics Basic Electronics Lab	2 0	0	2	2					
	and offered as given below. This will be effective from the									
	Course Title	L	T	Р	С					
	Basic Electrical and Electronics Engineering Basic Electrical and Electronics Engineering Lab	3 0	0	2	3					
	To consider and approve the revised programme credit structure and curriculum for the following Bachelor of Technology programmes and Five Year Integrated Master of Technology in Construction Technology and Management. 1) Bachelor of Technology in Biotechnology 2) Bachelor of Technology in Chemical Engineering 3) Bachelor of Technology in Civil Engineering 4) Bachelor of Technology in Computer Science and Engineering 5) Bachelor of Technology in Computer Science and Engineering with Specialization in Artificial Intelligence and Machine Learning 6) Bachelor of Technology in Computer Science and Engineering with Specialization in Artificial									

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- 7) Bachelor of Technology in Computer Science and Engineering with Specialization in Bioinformatics
- 8) Bachelor of Technology in Computer Science and Engineering with Specialization in Block Chain Technology
- Bachelor of Technology in Computer Science and Engineering with Specialization in Cyber Physical Systems
- 10) Bachelor of Technology in Computer Science and Engineering with Specialization in Data Science
- 11) Bachelor of Technology in Computer Science and Engineering with Specialization in Information Security
- 12) Bachelor of Technology in Computer Science and Engineering with Specialization in Internet of Things
- 13) Bachelor of Technology in Electronics and Instrumentation Engineering
- 14) Bachelor of Technology in Electrical and Electronics Engineering
- 15) Bachelor of Technology in Electronics and Communication Engineering
- 16) Bachelor of Technology in Electronics and Communication Engineering with Specialization in Biomedical Engineering
- 17) Bachelor of Technology in Electronics and Computer Engineering
- 18) Bachelor of Technology in Fashion Technology
- 19) Bachelor of Technology in Information Technology
- 20) Bachelor of Technology in Mechanical Engineering
- 21) Bachelor of Technology in Mechanical with Specialization in Automotive Engineering
- 22) Bachelor of Technology in Mechanical Engineering with Specialization in Electrical Vehicles
- 23) Bachelor of Technology in Mechanical Engineering with Specialization in Manufacturing Engineering
- 24) Bachelor of Technology in Mechatronics and Automation
- 25) Five Year Integrated Master of Technology in Construction Technology and Management

The revised programme credit structure and curriculum are enclosed as Annexure 2.

(Annexure 2)

The Academic Council considered and approved the same.

Item 67/4.1

To consider and approve the course contents for the courses of Bachelor of Technology programmes and Five Year Integrated Master of Technology in Construction Technology and Management.

			_			
	Engineering Sciences					
Course Code	Course Title	L	T	Р	С	Prerequisite
BEEE102L	Basic Electrical and Electronics Engineering	3	0	0	3	NIL
BEEE102P	Basic Electrical and Electronics Engineering Lab	0	0	2	1	NIL
IEEE102L	Basic Electrical and Electronics Engineering	3	0	0	3	NIL
IEEE102P	Basic Electrical and Electronics Engineering Lab	0	0	2	1	NIL

(Annexure 3)

The Academic Council considered and approved the same.

Item 67/4.2

To consider and approve the course contents for the courses of Bachelor of Technology in Biotechnology.

	Discipline Cor	e Course				
Course Code	Course Title	L	Т	Р	С	Prerequisite
BBIT209L	Molecular Biology	3	0	0	3	BBIT202L, BBIT202P, BBIT204L BBIT204P
BBIT209P	Molecular Biology Lab	0	0	4	2	BBIT202L, BBIT202P, BBIT204L BBIT204P

3 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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	BBIT328L	Downstream Processing	3	0	0	3	BBIT301L, BBIT301P
	BBIT328P	Downstream Processing Lab	0	0	4	2	BBIT301L, BBIT301P
	The Academic (Samuell as a side and and amount of the same					(Annexure 4)
	The Academic C	Council considered and approved the same.					
Item 67/4.3	To consider an Information and	d approve the course contents for the cour Technology.	se of	Ba	chel	or of	Technology in
		Discipline Core Course					
	Course Code	Course Title	L	Т	Р	С	Prerequisite
	BITE411L	Big Data Analytics	3	0	0	3	BITE302L, BITE302P
		Council considered and approved the same.	9				(Annexure 5)
Item 67/4.4	Electronics and	d approve the course contents for the course Communication Engineering and Bachelor of Engineering with Specialization in Biomedical	of Te	chno	olog	y in E	
		Discipline Core Course					
	Course Code	Course Title	L	Т	Р	С	Prerequisite
	BECE317L	Wireless and Mobile Communications	3	0	0	3	BECE306L, BECE306P
*	BECE317P	Wireless and Mobile Communications Lab	0	0	2	1	BECE306L, BECE306P
	BECE318L	Optical Fiber Communications	3	0	0	3	BECE306L, BECE306P
	BECE318P	Optical Fiber Communications Lab	0	0	2	1	BECE306L, BECE306P
Item 67/4.5	To consider an	Council considered and approved the same. d approve the course contents for the cour Computer Engineering.	se of	Вас	chel	or of	(Annexure 6) Technology in
	Cauraa Cada	Discipline Core Course		_	В		Droroguioito
	Course Code BECM304L	Course Title Principles of Communication Systems	L 2	T 0	P 0	C 2	Prerequisite BECE206L BECE206P
n en	BECM304L	Course Title	2				
Item 67/4.6	The Academic C	Course Title Principles of Communication Systems		0	0	2	BECE206L BECE206P (Annexure 7)
Item 67/4.6	The Academic C	Course Title Principles of Communication Systems Council considered and approved the same. d approve the course contents for the course		0	0	2	BECE206L BECE206P (Annexure 7)
Item 67/4.6	The Academic C	Course Title Principles of Communication Systems Council considered and approved the same. d approve the course contents for the courselectronics Engineering.		0	0	2	BECE206L BECE206P (Annexure 7)

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	BEEE215P	DC Machines and Transformers Lab	0	0	2	1	BEEE102L, BEEE102P, BEEE202L
	BEEE312L	AC Machines	2	0	0	2	BEEE215L, BEEE215P
9	BEEE312P	AC Machines Lab	0	0	2	1	BEEE215L, BEEE215P
	The Academic (Council considered and approved the same.					(Annexure 8)
Item 67/4.7		d approve the course contents for the cour Instrumentation Engineering.	ses o	f Ba	chel	or of	Technology in
		Discipline Core Course					
	Course Code	Course Title	L	Т	Р	С	Prerequisite
	BEIE403L	Virtual Instrumentation	1	0	0	1	BEIE201L, BEIE201P
	BEIE403P	Virtual Instrumentation Lab	0	0	2	1	BEIE201L, BEIE201P
							(Annexure 9)
	The Academic (Council considered and approved the same.					
Item 67/4.8		d approve the course contents for the cou ineering and its Specialization programmes.	rse of	Bad	chel	or of	Technology in
		Discipline-Linked Engineering So	ience				
	Course Code	Course Title	L	Т	Р	С	Prerequisite
	BMEE330L	Control Systems	3	0	0	3	NIL
	The Academic (Council considered and approved the same.					(Annexure 10)
Item 67/4.9		d approve the course contents for the course and Engineering and its Specialization pro				or of	Technology in
		Discipline Core Courses					
	Course Code	Course Title	L	Т	Р	С	Prerequisite
	BCSE203E	Web Programming	1	0	4	3	NIL
	The Academic C	Council considered and approved the same.					(Annexure 11)
Item 67/5		nd approve the list of graduands from Ve and Postgraduate degrees.	ellore	Car	npus	s for	the award of
	The Academic C	Council considered and approved the same.					(Annexure 12)
Item 67/6		nd approve the list of graduands from Ch and Postgraduate degrees.	ennai	Cai	npu	s for	the award of
	The Academic C	Council considered and approved the same.					(Annexure 13)
Item 67/7	To consider an	d approve the list of graduands from Vello	re an	d C	heni	nai C	ampus for the
	awaru or Nesear	on adgreed.					

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Item 67/8 To consider and approve the Regulations for the Programmes offered Mode. Existing Academic Regulations will be followed for the programme Learning Mode with the following two exceptions: a) Grading Policy:	under Blended es offered unde	
Existing Academic Regulations will be followed for the programme Learning Mode with the following two exceptions: a) Grading Policy:	es offered unde	
Learning Mode with the following two exceptions: a) Grading Policy:		er Blended
	os offered unde	
Only Absolute Grading Policy will be followed for the programme Learning Mode.	.s officied unde	er Blended
b) Arrear Examination Student who fails to clear the course can register for arrear subsequent semester. Arrear examination fee will be as per the Ur the time of Arrear examination registration.		
The Academic Council considered and approved the same.		
Item 67/9 To consider and approve the change in the Internal Assessment Undergraduate Programmes.	modalities fo	or 3 Year
It is proposed to change the internal assessment components from %) to CAT – I (15%), CAT – II (15%) and Assignment(s) / Quizzes three years UG Programmes from the Academic Year 2022 – 23 on The Academic Council considered and approved the same with the su to the faculty members to fix the assessment methodology based on the same with the substitution of the faculty members.	/ Project (30%) wards.	for all the
Item 67/10 To consider and approve the inclusion of one hundred and forty (140) University Elective Category. Total four hundred and seventy three (47 been already approved in the 53 rd meeting of the Academic Council 2018 [Item No. 53.2.2], 57 th meeting of the Academic Council held on 8 No. 57.2.3], 58 th meeting of the Academic Council held on 26 th Februal 64 th meeting of the Academic Council held on 16 th December 2021 [I meeting of the Academic Council held on 17 th March 2022 [Item No. 65/th	3) NPTEL Cou held on 13 th 5 th December 2 y 2020 [Item N tem No. 64/13	rses have December 2019 [Item No.58.2.4],
Course Course Title	Duration	Credits
MOC2370 Safety in Construction	08 weeks	2
MOC2371 Space Flight Mechanics	12 weeks	3
MOC2372 Nuclear and particle physics	12 weeks	3
MOC2373 Nanotechnology: Science and Applications	08 weeks	2
MOC2374 Selection Of Nanomaterials For Energy Harvesting and Storage Applications	4 Weeks	1
MOC2375 Biomedical Nanotechnology	4 Weeks	1
MOC2376 Solar Photovoltaics: Fundamental, Technology and Applications	08 weeks	2
MOC2377 Cloud computing	12 Weeks	3

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MOC2378	Aircraft Structures - I	8 Weeks	2
MOC2379	Introduction To CFD	12 Weeks	3
MOC2380	Space Flight Mechanics	12 Weeks	3
MOC2381	Dairy And Food Process And Products Technology	12 Weeks	3
MOC2382	Farm Machinery	12 Weeks	3
MOC2383	Fundamentals Of Food Process Engineering	12 Weeks	3
MOC2384	Micro Irrigation Engineering	12 Weeks	3
MOC2385	Architectural Conservation And Historic Preservation	8 Weeks	2
MOC2386	Building Materials And Composites	8 Weeks	2
MOC2387	Urban Land use And Transportation Planning	12 Weeks	3
MOC2388	Urban Utilities Planning: Water Supply, Sanitation and Drainage	12 Weeks	3
MOC2389	Industrial Biotechnology	12 Weeks	3
MOC2390	Immunology	12 Weeks	3
MOC2391	Wildlife Ecology	12 Weeks	3
MOC2392	Introduction to Biomedical Imaging Systems	12 Weeks	3
MOC2393	Environmental Biotechnology	12 Weeks	3
MOC2394	Fundamentals of Protein Chemistry	12 Weeks	3
MOC2395	Animal Physiology	12 Weeks	3
MOC2396	Introductory Field Structural Geology	4 Weeks	1
MOC2397	Theory of Elasticity	12 Weeks	3
MOC2398	Sustainable Transportation systems	12 Weeks	3
MOC2399	Geotechnical Engineering Laboratory	4 weeks	1
MOC2400	Dynamics of Structures	12 Weeks	3
MOC2401	Introduction to Engineering Seismology	12 Weeks	3
MOC2402	Design Of Reinforced Concrete Structures	12 Weeks	3
MOC2403	Design Of Steel Structures	12 Weeks	3
MOC2404	Ground Improvement	12 Weeks	3
MOC2405	Integrated Waste Management For A Smart City	12 Weeks	3
MOC2406	Introduction To Multimodal Urban Transportation Systems (MUTS)	12 Weeks	3
MOC2407	Matrix Method Of Structural Analysis	8 Weeks	2
MOC2408	Reinforced Concrete Road Bridges	4 Weeks	1
MOC2409	Soil Mechanics/Geotechnical Engineering I	12 Weeks	3
MOC2410	Wastewater Treatment And Recycling	12 Weeks	3
MOC2411	Earth Sciences For Civil Engineering Part - I & II	8 Weeks	2
MOC2412	Earthquake Geology:A tool for Seismic Hazard Assessment	12 Weeks	3
MOC2413	Finite Element Method and Computational Structural Dynamics	12 Weeks	3
MOC2414	Geotechnical Engineering-II	12 Weeks	3
MOC2415	Structural Geology	12 Weeks	3
MOC2416	Radiogenic Isotope Geology	12 Weeks	3
MOC2417	Principles and Practices of Process Equipment and Plant Design	12 Weeks	3
MOC2418	Introduction to interfacial waves	12 Weeks	3
MOC2419	Real-Time Systems	12 Weeks	3
MOC2420	Secure Computation: Part II	12 Weeks	3

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	MOC2421	Algorithmic Game Theory	12 Weeks	3
	MOC2422	Computational Number Theory and Algebra	12 Weeks	3
	MOC2423	Getting Started with Competitive Programming	12 Weeks	3
	MOC2424	Natural Language Processing	12 Weeks	3
	MOC2425	Object Oriented Analysis And Design	8 Weeks	2
	MOC2426	Circular dichroism (CD) and Mossbauer spectroscopy for chemists	12 Weeks	3
	MOC2427	Biological Inorganic Chemistry	12 Weeks	3
	MOC2428	Introduction To Polymer Science	8 Weeks	2
	MOC2429	Chemistry and Physics of Surfaces and Interfaces	8 Weeks	2
	MOC2430	NMR spectroscopy for Structural Biology	12 Weeks	3
	MOC2431	Analytical Chemistry	12 Weeks	3
	MOC2432	Stereochemistry	8 Weeks	2
	MOC2433	Control and Tuning Methods in Switched Mode Power Converters	12 Weeks	3
	MOC2434	Power System Protection	12 Weeks	3
	MOC2435	Signal Processing for mm Wave communication for 5G and beyond	12 Weeks	3
	MOC2436	Electrical Machines - I	12 Weeks	3
	MOC2437	Electrical Measurement And Electronic Instruments	12 Weeks	3
	MOC2438	Analog Communication	12 Weeks	3
	MOC2439	Digital Speech Processing	8 Weeks	2
	MOC2440	Modern Digital Communication Techniques	12 Weeks	3
	MOC2441	Power System Analysis	12 Weeks	3
	MOC2442	Introduction to Semiconductor Devices	12 Weeks	3
	MOC2443	Accreditation And Outcome Based Learning	8 Weeks	2
	MOC2444	Globalization And Culture	8 Weeks	2
	MOC2445	Great Experiments In Psychology	4 Weeks	1
	MOC2446	Spoken Sanskrit: Basic and Intermediate Levels	12 Weeks	3
13.0	MOC2447	Urbanization and Environment	8 Weeks	2
	MOC2448	Water Society And Sustainability	4 Weeks	1
	MOC2449	Introducing Modern Western Art: Movements and Artists	4 Weeks	1
	MOC2450	Introduction to Indian Art - An appreciation	4 Weeks	1
	MOC2451	Elements of Visual Representation	8 Weeks	2
	MOC2452	Indian Art: Materials, Techniques and Artistic Practices	12 Weeks	3
	MOC2453	Public Speaking	12 Weeks	3
	MOC2454	An Introduction to Indian Literary Theory	8 Weeks	2
	MOC2455	Partition of India in Print Media and Cinema	12 Weeks	3
	MOC2456	Literary and Cultural Disability Studies: An Exploration	12 Weeks	3
	MOC2457	Fundamental Concepts in Sociolinguistics	12 Weeks	3
	MOC2458	Spatial Statistics and Spatial Econometrics	12 Weeks	3
	MOC2459	Economics of Banking and Finance Markets	12 weeks	3
	MOC2460	Introduction to Law on Electricity	8 Weeks	2
	MOC2461	Legal and Regulatory Issues in Biotechnology	4 Weeks	1
	MOC2462	Matrix Solver	12 Weeks	3
	MOC2463	Mathematical Methods in Physics 2	8 Weeks	2
	MOC2464	Geometry of Vision	4 Weeks	1

MOC2465	Introductory Course In Real Analysis	12 Weeks	3
MOC2466	Mathematical Methods For Boundary Value Problems	4 Weeks	1
MOC2467	Manufacturing Processes - Casting And Joining	4 Weeks	1
MOC2468	Computational Fluid Dynamics and Heat Transfer	12 Weeks	3
MOC2469	Advanced Fluid Mechanics	12 Weeks	3
MOC2470	Concepts Of Thermodynamics	12 Weeks	3
MOC2471	Energy Conservation And Waste Heat Recovery	12 Weeks	3
MOC2472	Engineering Drawing And Computer Graphics	12 Weeks	3
MOC2473	Heat Exchangers: Fundamentals And Design Analysis	12 Weeks	3
MOC2474	Mechanism And Robot Kinematics	8 Weeks	2
MOC2475	Biomechanics of Joints and Orthopaedic Implants	8 Weeks	2
MOC2476	Design of Mechatronic Systems	12 Weeks	3
MOC2477	Mechanics and Control of Robotic Manipulators	8 Weeks	2
MOC2478	Dynamics and Control of Mechanical Systems	12 Weeks	3
MOC2479	Advanced Thermodynamics and Combustion	12 Weeks	3
MOC2480	Production Technology: Theory And Practice	12 Weeks	3
MOC2481	Management Information System	12 Weeks	3
MOC2482	Patent Search and Analysis	8 Weeks	2
MOC2483	Principles Of Management	12 Weeks	3
MOC2484	Soft Skills For Business Negotiations And Marketing Strategies	12 Weeks	3
MOC2485	Stress Management	4 Weeks	1
MOC2486	Automation in Production Systems and Management	12 Weeks	3
MOC2487	Commodity Derivatives And Risk Management	8 Weeks	2
MOC2488	Corporate Finance	8 Weeks	2
MOC2489	Customer Relationship Management	8 Weeks	2
MOC2490	Decision Support System For Managers	12 Weeks	3
MOC2491	Gender Justice And Workplace Security	4 Weeks	1
MOC2492	Industrial Safety Engineering	12 Weeks	3
MOC2493	Mechanical Behavior of Materials	12 Weeks	3
MOC2494	Techniques of Materials Characterization	12 Weeks	3
MOC2495	Advanced Materials And Processes	12 Weeks	3
MOC2496	Surface Mining Technology	12 Weeks	3
MOC2497	Underground Mining of Metalliferous deposits	12 Weeks	3
MOC2498	Mine Closure and Sustainability Planning	12 Weeks	3
MOC2499	Water Economics And Governance	12 Weeks	3
MOC2500	Numerical Ship and Offshore Hydrodynamics	12 Weeks	3
MOC2501	Mathematical Methods In Physics -I	12 Weeks	3
MOC2502	Solid State Physics	12 Weeks	3
MOC2503	Upstream LNG Technology	12 Weeks	3
MOC2504	Introduction to Astrophysical Fluids	12 Weeks	3
MOC2505	Bonds and Bands in Solids	12 Weeks	3
MOC2506	Foundations of Classical Electrodynamics	12 Weeks	3
MOC2507	Economics of Banking and Finance Markets	12 weeks	3
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MOC2508	Security Analysis & Portfolio Management	12 weeks	3

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The Academic Council deferred the above item with the suggestion that Dean Academics may analyze and approve the NPTEL course based on the requirement of the students.

Item 67/11

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Automotive Engineering.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/3.5.b].

Discipline Core Courses								
Course Code	Course Title	TL	Т	Р	С	Prerequisite		
MAUE501L	Automotive Body and Chassis Systems	3	0	0	3	NIL		
MAUE502L	Engine Combustion and Emission	3	0	0	3	· NIL		
MAUE502P	MAUE502P Engine Combustion and Emission Lab				1	NIL		
MAUE503L	Automotive Electrical and Electronics	3	0	0	3	NIL		
MAUE503P	Automotive Electrical and Electronics Lab	0	0	2	1	NIL		
MAUE504L	Automotive Transmission System	3	0	0	3	NIL		
MAUE505L	Vehicle Dynamics	3	0	0	3	NIL		
MAUE505P	Vehicle Dynamics Lab	0	0	2	1	NIL		
MAUE506L	Hybrid Electric Vehicles	3	0	0	3	NIL		
MMAT502L	Advanced Mathematical Methods	3	0	0	3	NIL		
	Discipline Electives							
MAUE601L	Engine Design and Development	3	0	0	3	NIL		
MAUE602L	Battery and Fuel Cell	3	0	0	3	NIL		
MAUE603L	Vehicle and Engine Testing	3	0	0	3	NIL		
MAUE604L	Vehicle Maintenance and Diagnostics	3	0	0	3	NIL		
MAUE605L	Vehicle Aerodynamics	3	0	0	3	NIL		
MAUE606L	Vehicle Crashworthiness	3	0	0	3	NIL		
MAUE607L	Design of Vehicle Drivelines	3	0	0	3	NIL		
MAUE608L	Noise, Vibration and Harshness	3	0	0	3	NIL		
MAUE608P	Noise, Vibration and Harshness Lab	0	0	2	1	NIL		
MAUE609L	Computational Fluid Flow and Heat Transfer	3	0	0	3	NIL		
MAUE611L	Vehicle Safety and Lighting	3	0	0	3	NIL		
MCDM504L	Finite Element Methods	3	0	0	3	NIL		
MCDM504P	Finite Element Methods Lab	0	0	2	1	NIL		
	Project and Internship							
MAUE696J	Study Oriented Project				02	NIL		
MAUE697J	Design Project				02	NIL		
MAUE698J	Internship I/ Dissertation I				10	NIL		
MAUE699J	Internship II/ Dissertation II				12	NIL		

(Annexure 15)

The Academic Council considered and approved the same.

Item 67/12

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in CAD / CAM.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/3.5.e].

Discipline Core Courses									
Course Code	Course Title	L	Т	Р	С	Prerequisite			
MCDM501L	Advanced Mechanics of Solids	2	1	0	3	NIL			
MCDM502L	Applied Materials Engineering	3	0	0	3	NIL			
MCDM503L	Computer Graphics and Geometric Modelling	2	0	0	2	NIL			

10 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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Computer Graphics and Geometric Modelling Lab	0	0	2	1	NIL
Finite Element Methods	3	0	0	3	NIL
Finite Element Methods Lab	0	0	2	1	NIL
Integrated Manufacturing Systems	3	0	0	3	NIL
Integrated Manufacturing Systems Lab	0	0		1	NIL
Advanced Vibration Engineering		0	0		NIL
Additive Manufacturing Technology	3	0	0	3	NIL
Additive Manufacturing Technology Lab	0	0	2	1	NIL
Discipline Electives					
Vehicle Dynamics	3	0	0	3	NIL
Vehicle Dynamics Lab	0	0	2	1	NIL
Vehicle Aerodynamics	3	0	0	3	NIL
Design and Analysis of Experiments	2	1	0	3	NIL
Advanced Finite Element Methods	3	0	0	3	NIL
Design For Manufacture and Assembly	3	0	0	3	NIL
Product Design and Life Cycle Management	3	0	0	3	NIL
Fracture Mechanics	3	0	0	3	NIL
Manufacturing and Mechanics of Composites Materials	3	0	0	3	NIL
Optimization Methods	3	0	0	3	NIL
Computational and Experimental Vibration Analysis and Control	3	0	0	3	NIL
Computational and Experimental Vibration Analysis and Control Lab	0	0	2	1	NIL
Computational Fluid Dynamics	3	0	0	3	NIL
Computational Fluid Dynamics Lab	0	0	2	1	NIL
Design Thinking and Innovation	3	0	0	3	NIL
Machine Fault Diagnostics					NIL
Computer Aided Process Planning					NIL
Advanced Manufacturing Technology		0	0		NIL
Statistics and Quality Management	3	0	0	3	NIL
Project and Internship					
Study Oriented Project				02	NIL
					NIL
Internship I/ Dissertation I				10	NIL
Internship II/ Dissertation II				12	. NIL
	Finite Element Methods Finite Element Methods Lab Integrated Manufacturing Systems Integrated Manufacturing Systems Lab Advanced Vibration Engineering Additive Manufacturing Technology Additive Manufacturing Technology Lab Discipline Electives Vehicle Dynamics Vehicle Dynamics Vehicle Aerodynamics Design and Analysis of Experiments Advanced Finite Element Methods Design For Manufacture and Assembly Product Design and Life Cycle Management Fracture Mechanics Manufacturing and Mechanics of Composites Materials Optimization Methods Computational and Experimental Vibration Analysis and Control Computational Fluid Dynamics Computer Aided Process Planning Advanced Manufacturing Technology Statistics and Quality Management Project and Internship Study Oriented Project Design Project	Finite Element Methods Finite Element Methods Lab Integrated Manufacturing Systems Integrated Manufacturing Systems Lab Advanced Vibration Engineering Additive Manufacturing Technology Additive Manufacturing Technology Lab Discipline Electives Vehicle Dynamics Vehicle Dynamics Lab Vehicle Aerodynamics Design and Analysis of Experiments Advanced Finite Element Methods Design For Manufacture and Assembly Product Design and Life Cycle Management Fracture Mechanics Manufacturing and Mechanics of Composites Materials Optimization Methods Computational and Experimental Vibration Analysis and Control Computational Fluid Dynamics Computational Fluid Dynamics Computational Fluid Dynamics Computational Fluid Dynamics Computer Aided Process Planning Advanced Manufacturing Technology Statistics and Quality Management Study Oriented Project Design Project Internship I/ Dissertation I	Finite Element Methods Finite Element Methods Lab Finite Element Methods Lab Integrated Manufacturing Systems Integrated Manufacturing Systems Lab Advanced Vibration Engineering Additive Manufacturing Technology Additive Manufacturing Technology Lab Discipline Electives Vehicle Dynamics Vehicle Dynamics Lab Vehicle Aerodynamics Design and Analysis of Experiments Advanced Finite Element Methods Design For Manufacture and Assembly Product Design and Life Cycle Management Fracture Mechanics Materials Optimization Methods Computational and Experimental Vibration Analysis and Control Computational Fluid Dynamics Lab Design Thinking and Innovation Machine Fault Diagnostics Computer Aided Process Planning Advanced Manufacturing Technology Statistics and Quality Management Study Oriented Project Design Project Internship I/ Dissertation I	Lab	Finite Element Methods

(Annexure 16)

The Academic Council considered and approved the same.

Item 67/13

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Manufacturing Engineering.

The curriculum was approved in the 40^{th} meeting of the Academic Council held on 18^{th} March 2016 [Item No. 40/3.5.a].

	Discipline Core Courses							
Course Code	Course Title	L	Т	Р	С	Prerequisite		
MMAE501L	Advanced Materials and Characterization	3	0	0	3	NIL		
MMAE502L	Finite Element Methods in Manufacturing	3	0	0	3	NIL		
MMAE502P	Finite Element Methods in Manufacturing Lab	0	0	2	1	NIL		
MMAE503L	Additive Manufacturing Technology	3	0	0	3	NIL		
MMAE503P	Additive Manufacturing Technology Lab	0	0	2	1	NIL		
MMAE504L	Theory of Metal Forming	3	0	0	3	NIL		
MMAE505L	Mechatronics and Automation	3	0	0	3	NIL		
MMAE505P	Mechatronics and Automation Lab	0	0	2	1	NIL		
MMAE506L	Modern Machining Processes	3	0	0	3	NIL		
MMAE507L	Computer Integrated Manufacturing	3	0	0	3	NIL		

11 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

m. Al

	Discipline Electives							
MMAE601L	Metrology and Non-destructive Testing	3	0	0	3	NIL .		
MMAE602L	Optimization Techniques	2	1	0	3	NIL		
MMAE603L	Micro and Nano Manufacturing	3	0	0	3	NIL		
MMAE604L	Sustainable Manufacturing	3	0	0	3	NIL		
MMAE605L	Supply Chain and Logistics Management	3	0	0	3	NIL		
MMAE606L	Maintenance Engineering	3	0	0	3	NIL		
MMAE607L	Manufacturing Information Systems	3	0	0	3	NIL		
MMAE608L	Design and Analysis of Experiments	2	1	0	3	NIL		
MMAE609L	Advanced Tool Engineering	3	0	0	3	NIL		
MMAE610L	Casting and Welding Technology	3	0	0	3	NIL		
MMAE610P	Casting and Welding Technology Lab	0	0	2	1	NIL		
MMAE611L	Quality and Reliability Engineering	3	0	0	3	NIL		
	Project and Internship							
MMAE696J	Study Oriented Project				02	NIL		
MMAE697J	Design Project				02	NIL		
MMAE698J	Internship I/ Dissertation I				10	NIL		
MMAE699J	Internship II/ Dissertation II				12	NIL		

(Annexure 17)

The Academic Council considered and approved the same.

Item 67/14

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Mechatronics.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/3.5.f].

Discipline Core Courses								
Course Code	Course Title	L	Т	Р	С	Prerequisite		
MMHA501L	Advanced Sensors and Instrumentation	3	0	0	3	NIL		
MMHA501P	Advanced Sensors and Instrumentation Lab	0	0	2	1	NIL		
MMHA502L	Actuators and Drives	3	0	0	3	NIL		
MMHA503L	Robot dynamics and Programming	3	0	0	3	NIL		
MMHA503P	Robot dynamics and Programming Lab	0	0	2	1	NIL		
MMHA504L	System Design and Control	3	0	0	3	NIL		
MMHA505L	Industrial Controllers	3	0	0	3	NIL		
MMHA505P	Industrial Controllers Lab	0	0	2	1	NIL		
MMHA506L	Advanced Control Systems	3	0	0	3	NIL		
MMHA507L	Industrial Process Automation	2	0	0	2	NIL		
MMHA507P	Industrial Process Automation Lab	0	0	2	1	NIL		
Discipline Electives								
MMHA601L	Machine Vision Systems	3	0	0	3	NIL		
MMHA602L	Mobile and Autonomous Robots	3	0	0	3	NIL		
MMHA603L	MEMS and Microsystems	3	0	0	3	NIL		
MMHA604L	Data acquisition and Digital Signal Processing	3	0	0	3	NIL		
MMHA605L	Embedded Systems	3	0	0	3	NIL		
MMHA606L	Autotronics and Vehicle Intelligence	3	0	0	3	NIL		
MMHA607L	Intelligent Systems	3	0	0	3	NIL		
MMHA608L	Wireless Sensor Networks	2	1	0	3	NIL		
MMHA609L	Virtual Reality and Haptics	3	0	0	3	NIL		
MMHA610L	Condition Monitoring Techniques	3	0	0	3	NIL		
MMHA611L	Bio-Mechatronics	3	0	0	3	NIL		
MMHA612L	Internet of Things and Smart Manufacturing	3	0	0	3	NIL		
MMHA613L	Manufacturing Automation	3	0	0	3	NIL		
MMHA613P	Manufacturing Automation Lab	0	0	2	1	NIL		
MMHA614L	Fluid Power System Design	3	0	0	3	NIL		

12 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

m- Au

MMHA614P	Fluid Power System Design Lab	0	0	2	1	NIL	
Project and Internship							
MMHA696J	Study Oriented Project				02	NIL	
MMHA697J	Design Project				02	NIL	
MMHA698J	Internship I/ Dissertation I				10	NIL	
MMHA699J	Internship II/ Dissertation II				12	NIL	

(Annexure 18)

The Academic Council considered and approved the same.

Item 67/15

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Automotive Electronics.

The curriculum was approved in the 40^{th} meeting of the Academic Council held on 18^{th} March 2016 [Item No. 40/10].

	Discipline Core Courses					
Course Code	Course Title	L	Т	Р	С	Prerequisite
MAME501L	Sensors and Engine Management Systems	3	0	0	3	NIL
MAME502L	Microcontrollers for Vehicular Systems	3	0	0	3	NIL
MAME502P	Microcontrollers for Vehicular Systems Lab	0	0	2	1	NIL
MAME503L	Vehicle Control Systems	3	0	0	3	NIL
MAME504L	Automotive Networking and Protocols	3	0	0	3	NIL
MAME504P	Automotive Networking and Protocols Lab	0	0	2	1	NIL
MAME505L	Electric and Electronic Power Systems for Vehicles	3	0	0	3	NIL
MAME506L	Automotive Power Electronics and Motor Drives	3	0	0	3	NIL
MAME506P	Automotive Power Electronics and Motor Drives Lab	0	0	2	1	NIL
MAME507L	Alternative Drives, Traction and Controls	3	0	0	3	MAME505L
	Discipline Electives					
MAME601L	Data Acquisition and Signal Conditioning	3	0	0	3	NIL
MAME601P	Data Acquisition and Signal Conditioning Lab	0	0	2	1	NIL
MAME602L	AUTOSAR and ISO Standards for Automotive Systems	2	0	0	2	NIL
MAME603L	Soft Computing Techniques for Automotive Applications	3	0	0	3	NIL
MAME604L	Automotive EMI and EMC Standards	3	0	0	3	NIL
MAME605L	Vehicular Information and Communication Systems	3	0	0	3	NIL
MAME606L	Parallel Programming using Multi cores and Graphical Programming Units	3	0	0	3	NIL
MAME607L	Digital Signal Processing and its Applications	3	0	0	3	NIL
MAME607P	Digital Signal Processing and its Applications Lab	0	0	2	1	NIL
MAME608L	Open Source Hardware and Software System Design	3	0	0	3	NIL
MAME609L	Machine Vision System for Automotive	3	0	0	3	NIL
MAME609P	Machine Vision System for Automotive Lab	0	0	2	1	NIL
MAME610L	Automotive Fault Diagnostics	3	1	0	4	NIL
MAME611L	Emission Control and Diagnosis	3	0	0	3	NIL
MAME612L	Vehicle Safety Systems	2	0	0	2	NIL
MAME613L	Vehicle Bodies	2	0	0	2	NIL
MAME614L	Engine Peripherals	2	0	0	2	NIL
MAME615L	Vehicle Security and Comfort Systems	3	0	0	3	NIL
9	Project and Internship					
MAME696J	Study Oriented Project				02	NIL

13 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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The Academic	Council considered and approved the same.		(Annexure 19)
MAME699J	Internship II/ Dissertation II	12	NIL
MAME698J	Internship I/ Dissertation I	10	NIL
MAME697J	Design Project	02	NIL

Item 67/16

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Biomedical Engineering.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/6.3.f].

Discipline Core Courses							
Course Code	Course Title	L	T	Р	С	Prerequisite	
MBML501N	Anatomy and Physiology	1	0	0	1	NIL	
MBML502N	Basic Electronics and Measurements	1	0	0	1	NIL	
MBML503L	Biomedical Sensors an Data Acquisition Technique	2	0	0	2	NIL	
MBML503P	Biomedical Sensors an Data Acquisition Techniques Lab	0	0	2	1	NIL	
MBML504L	Bio-signal Processing and Analysis	3	0	0	3	NIL	
MBML504P	Bio-signal Processing and Analysis Lab	0	0	2	1	NIL	
MBML505L	Embedded Systems and IoT for Biomedical Applications	3	0	0	3	NIL	
MBML505P	Embedded Systems and IoT for Biomedical Applications Lab	0	0	2	1	NIL	
MBML506L	Medical Image Processing	3	0	0	3	NIL	
MBML506P	Medical Image Processing Lab	0	0	2	1	NIL	
MBML507L	Biomedical Equipment	3	0	0	3	NIL	
MBML508L	Medical Imaging Techniques	3	0	0	3	NIL	
MBML509L	Health Care Management	3	0	0	3	NIL	
Discipline Electives							
MBML601L	Rehabilitation Engineering	3	0	0	3	NIL	
MBML602L	Biomaterials	3	0	0	3	NIL	
MBML603L	Biomechanics	3	0	0	3	NIL	
MBML604L	Data Mining in Healthcare	3	0	0	3	NIL	
MBML605L	Big Data Analytics in Medical Applications	3	0	0	3	NIL	
MITS602L	Micro and Nano Fluidics	3	0	0	3	NIL	
MBML606L	MEMS and NEMS for Biomedical Applications	3	0	0	3	NIL	
MBML607L	Physiological Control Systems	3	0	0	3	NIL	
MBML608L	Artificial Neural Network	3	0	0	3	NIL	
MBML609L	Networking and Information System in Medicine	3	0	0	3	NIL	
MBML610L	Medical Robotics	3	0	0	3	NIL	
MBML611L	Digital Healthcare and Medical Standards	3	0	0	3	NIL	
Till the state of	Project and Internship						
MBML696J	Study Oriented Project				02	NIL	
MBML697J	Design Project				02	NIL	
MBML698J	Internship I/ Dissertation I				10	NIL	
MBML699J	Internship II/ Dissertation II				12	NIL	

(Annexure 20)

The Academic Council considered and approved the same.

Item 67/17

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Communication Engineering.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/6.3.a].

14 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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	Discipline Core Courses					
Course Code	Course Title	L	Т	Р	С	Prerequisite
MECE501L	Mathematics for Communication Engineering	3	0	0	3	NIL
MECE502L	Advanced Digital Communication	3	0	0	3	NIL
MECE502P	Advanced Digital Communication Lab	0	0	2	1	NIL
MECE503L	Advanced Digital Signal Processing	3	0	0	3	NIL
MECE503P	Advanced Digital Signal Processing Lab	0	0	2	1	NIL
MECE504L	RF and Microwave Circuit Design	3	0	0	3	NIL
MECE504P	RF and Microwave Circuit Design Lab	0	0	2	1	NIL
MECE505L	Fiber Optic Communication and Networks	3	0	0	3	NIL
MECE506L	High Performance Communication Networks	3	0	0	3	NIL
MECE507L	Modern Wireless Communication Systems	3	0	0	3	NIL
	Discipline Electives					
MECE601L	Advances in Wireless Networks	2	0	0	2	NIL
MECE601P	Advances in Wireless Networks Lab	0	0	2	1	NIL
MECE602L	Advanced Antenna Engineering	3	0	0	3	NIL
MECE603L	Mobile Adhoc Networks	3	0	0	3	NIL
MECE604L	Modeling of Wireless Communication Systems	3	0	0	3	NIL
MECE605L	Modern Satellite Communication	3	0	0	3	NIL
MECE606L	Coding for MIMO Communication	3	0	0	3	NIL
MECE607L	Advanced Wireless Sensor Networks	2	0	0	2	NIL
MECE607P	Advanced Wireless Sensor Networks Lab	0	0	2	1	NIL
MECE608L	Microwave Integrated Circuits	3	0	0	3	NIL
MECE609L	Image processing and Feature Extraction	3	0	0	3	NIL
MECE610L	Multirate Systems	3	0	0	3	NIL
MECE611L	Adaptive Signal Processing	3	0	0	3	NIL
MECE612L	Optical Broadband Access Networks	3	0	0	3	NIL
MECE613L	RF MEMS	3	0	0	3	NIL
MECE614L	Foundations of Machine Learning	3	0	0	3	NIL
MECE615L	Information and Network Security	3	0	0	3	NIL
	Project and Internship					
MECE696J	Study Oriented Project				02	NIL
MECE697J	Design Project				02	NIL
MECE698J	Internship I/ Dissertation I				10	NIL
MECE699J	Internship II/ Dissertation II				12	NIL

(Annexure 21)

The Academic Council considered and approved the same.

Item 67/18

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Embedded Systems.

The curriculum was approved in the 40^{th} meeting of the Academic Council held on 18^{th} March 2016 [Item No. 40/6.3.b].

Discipline Core Courses							
Course Code	Course Title	L	Т	Р	С	Prerequisite	
MEDS501L	Embedded System Design	3	0	0	3	NIL	
MEDS502L	Microcontroller Architecture and Organization	3	0	0	3	NIL	
MEDS502P	Microcontroller Architecture and Organization Lab	0	0	2	1	NIL	
MEDS503L	Embedded Programming	3	0	0	3	. NIL	
MEDS503P	Embedded Programming Lab	0	0	2	1	NIL	
MEDS504L	In Vehicle Networking	3	0	0	3	NIL	
MEDS505L	Real Time Operating System	3	0	0	3	NIL	
MEDS505P	Real Time Operating System Lab	0	0	2	1	NIL	
MEDS506L	Wireless and Mobile Communication	3	0	0	3	NIL	

15 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

m- An

MEDS507L	Electronic Hardware System Design	2	0	0	2	NIL		
MEDS507P	Electronic Hardware System Design Lab	0	0	2	1	NIL		
Discipline Electives								
MEDS601L	Electromagnetic Interference and Compatibility in ESD	3	0	0	3	NIL		
MEDS602L	Advanced Digital Image Processing	3	0	0	3	NIL		
MEDS603L	Design and Analysis of Algorithms	3	0	0	3	NIL		
MEDS604L	Embedded System design using FPGA	2	0	0	2	NIL		
MEDS604P	Embedded System design using FPGA Lab	0	0	2	1	NIL		
MEDS605L	Hardware Software Co-design	2	0	0	2	NIL		
MEDS606L	Modern Automotive Electronics Systems	3	0	0	3	NIL		
MAME602L	AUTOSAR and ISO Standards for Automotive Systems	2	0	0	2	NIL		
MEDS608L	Intelligent IoT System Design and Architecture	2	0	0	2	NIL		
MEDS608P	Intelligent IoT System Design and Architecture Lab	0	0	2	1	NIL		
MEDS609L	Fault Tolerance and Dependable Systems	3	0	0	3	NIL		
MEDS610L	Advanced Machine Learning and Deep Learning	2	0	0	2	NIL		
MEDS610P	Advanced Machine Learning and Deep Learning Lab	0	0	2	1	NIL		
MEDS611L	Parallel Processing and Computing	3	0	0	3	NIL		
MEDS612L	Advanced Embedded Programming	3	0	0	3	NIL		
MEDS607L	Advanced Processors and its Applications	2	0	0	2	NIL		
MEDS607P	Advanced Processors and its Applications Lab	0	0	2	1	NIL		
	Project and Internship							
MEDS696J	Study Oriented Project				02	NIL		
MEDS697J	Design Project				02	NIL		
MEDS698J	Internship I/ Dissertation I				10	NIL		
MEDS699J	Internship II/ Dissertation II				12	NIL		

(Annexure 22)

The Academic Council considered and approved the same.

Item 67/19

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Internet of Things and Sensor Systems.

The curriculum was approved in the 55th meeting of the Academic Council held on 13th June 2019 [Item No. 55/6.1].

Discipline Core Courses								
Course Code	Course Title	L	Т	Р	С	Prerequisite		
MITS501L	Principles of Sensors and Signal Conditioning	2	0	0	2	NIL		
MITS501P	Principles of Sensors and Signal Conditioning Lab	0	0	2	1	NIL		
MITS502L	IoT Fundamentals and Architecture	2	0	0	2	NIL		
MITS502P	IoT Fundamentals and Architecture Lab	0	0	4	2	NIL		
MITS503P	Data Acquisition Lab	0	0	4	2	NIL		
MITS504P	System Dynamics and Control Systems Lab	0	0	4	2	NIL		
MITS505L	Microcontrollers for IoT Prototyping	3	0	0	3	NIL		
MITS505P	Microcontrollers for IoT Prototyping Lab	0	0	2	1	NIL		
MITS506L	Wireless Sensor Networks and IoT	3	0	0	3	NIL		
MITS507L	Signal Processing and Data Analytics	3	0	0	3	NIL		
MITS508L	Deep Learning - An Approach to Artificial Intelligence	3	0	0	3	NIL		
	Discipline Electives							
MITS601L	Flexible and Wearable Sensors	3	0	0	3	NIL		
MITS602L	Micro and Nano Fluidics	3	0	0	3	NIL		
MITS603L	Chemical and Environmental Sensor	3	0	0	3	NIL		

16 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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MITS604L	Cloud and Fog Computing	3	0	0	3	NIL
MITS605L	IoT Security and Trust	3	0	0	3	NIL
MITS606L	IoT Applications and Web development	3	0	0	3	NIL
MITS607L	Micro Systems and Hybrid Technology	3	0	0	3	NIL
MITS608L	RF and Microwave Sensors	3	0	0	3	NIL
MITS609L	Biomedical sensors	3	0	0	3	NIL
MITS610L	Multi-disciplinary Product Development	3	0	0	3	NIL
MITS611L	Automotive Sensors and in-Vehicle Networking	3	0	0	3	NIL
MITS612L	Fibre optic Sensors and Photonics	3	0	0	3	NIL
	Project and Internship					
MITS696J	Study Oriented Project				02	NIL
MITS697J	Design Project				02	NIL
MITS698J	Internship I/ Dissertation I				10	NIL
MITS699J	Internship II/ Dissertation II				12	NIL

(Annexure 23)

The Academic Council considered and approved the same.

Item 67/20

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Nanotechnology.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/6.3.c].

	Discipline Core Courses					
Course Code	Course Title	L	Τ	Р	С	Prerequisite
MNAT501L	Semiconductor Device Physics and Technology	3	0	0	3	NIL
MNAT502L	Physics and Chemistry of Solids	3	0	0	3	NIL
MNAT503L	Quantum Physics for Nanostructures	3	0	0	3	NIL
MNAT504L	Carbon Nanomaterials	3	0	0	3	NIL
MNAT505L	Synthesis of Nanomaterials and Thin Film Deposition	3	0	0	3	NIL
MNAT505P	Synthesis of Nanomaterials and Thin Film Deposition Lab	0	0	2	1	NIL
MNAT506L	Nanomaterial Characterization Techniques	3	0	0	3	NIL
MNAT506P	Nanomaterial Characterization Techniques Lab	0	0	2	1	NIL
MNAT507L	Nanoelectronics	3	0	0	3	MNAT503L
MNAT507P	Nanoelectronics Lab	0	0	2	1	MNAT503L
	Discipline Electives					
MNAT601L	MEMS to NEMS	3	0	0	3	NIL
MNAT602L	Nanosensors	3	0	0	3	NIL
MNAT603L	Nanophotonics	3	0	0	3	MNAT503L
MNAT604L	Lithographic Techniques for Device Fabrication	3	0	0	3	NIL
MNAT605L	Plasmonics	3	0	0	3	MNAT503L
MNAT606L	Nanomagnetism- Fundamentals and Applications	3	0	0	3	MNAT503L
MNAT607L	Energy Technologies	3	0	0	3	MNAT502L
MNAT608L	Spintronics	3	0	0	3	MNAT503L
MNAT609L	Nanoelectronic Circuit Design	3	0	0	3	MNAT507L
	Project and Internship					
MNAT696J	Study Oriented Project				02	NIL
MNAT697J	Design Project				02	NIL
MNAT698J	Internship I/ Dissertation I				10	NIL
MNAT699J	Internship II/ Dissertation II				12	NIL

(Annexure 24)

The Academic Council considered and approved the same.

17 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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Item 67/21

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in VLSI Design.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/6.3.d].

	Discipline Core Courses	-					
Course Code	Course Title	L	Т	Р	С	Prerequisite	
MVLD501L	Physics of VLSI Devices	3	0	0	3	NIL	
MVLD502L	Digital IC Design	3	0	0	3	NIL	
MVLD503L	Digital Design with FPGA	2	0	0	2	NIL	
MVLD503P	Digital Design with FPGA Lab	0	0	2	1	NIL	
MVLD504L	Analog IC Design	3	0	0	3	NIL	
MVLD504P	Analog IC Design Lab	0	0	2	1	NIL	
MVLD505L	ASIC Design	3	0	0	3	NIL	
MVLD505P	ASIC Design Lab	0	0	2	1	NIL	
MVLD506L	VLSI Testing and Testability	3	0	0	3	NIL	
MVLD506P	VLSI Testing and Testability Lab	0	0	2	1	NIL	
MVLD507L	IC Technology	3	0	0	3	NIL	
Discipline Electives							
MVLD601L	Computer Aided Design for VLSI	3	0	0	3	NIL	
MVLD602L	Low Power IC Design	3	0	0	3	MVLD502L	
MVLD603L	VLSI Verification Methodologies	3	0	0	3	NIL	
MVLD604L	Scripting Languages for VLSI Design Automation	3	0	0	3	NIL	
MVLD605L	Advanced Computer Arithmetic	3	0	0	3	NIL	
MVLD606L	Mixed Signal IC Design	3	0	0	3	MVLD504L	
MVLD607L	RFIC Design	3	0	0	3	MVLD504L	
MVLD608L	VLSI Digital Signal Processing	3	0	0	3	NIL	
MVLD609L	System-on-Chip Design	3	0	0	3	NIL	
MVLD610L	Nanoscale Devices and Circuit Design	3	0	0	3	MVLD501L	
MVLD611L	Advanced Computer Architecture	3	0	0	3	NIL	
MVLD612L	Micro Sensors and Interface Electronics	3	0	0	3	NIL	
MVLD613L	System Design with FPGA	3	0	0	3	NIL	
MVLD614L	DSP Architectures	3	0	0	3	NIL	
MVLD615L	Memory Design and Testing	3	0	0	3	NIL	
	Project and Internship						
MVLD696J	Study Oriented Project				02	NIL	
MVLD697J	Design Project				02	NIL	
MVLD698J	Internship I/ Dissertation I				10	NIL	
MVLD699J	Internship II/ Dissertation II				12	NIL	

(Annexure 25)

The Academic Council considered and approved the same.

Item 67/22

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Construction Technology and Management.

The curriculum was approved in the 49th meeting of the Academic Council held on 15th March 2018 [Item No. 49/7.1].

Discipline Core Courses									
Course Code	Course Title	L	Т	Р	С	Prerequisite			
MCTM501L	Construction Practices and Equipment	2	0	0	2	NIL			
MCTM502L	Modern Construction Materials	2	0	0	2	NIL			
MCTM503L	Construction Planning and Scheduling	2	2	0	4	NIL			
MCTM504L	Quality Control and Safety	2	1	0	3	NIL			
MCTM505L	Contract and Administration Planning	3	0	0	3	NIL			
MCTM506L	Construction Economics and Finance	3	1	0	4	NIL			

18 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

MCTM507L	Computer Application in Infrastructure Management	1	1	0	2	NIL	
MCTM507P	Computer Application in Infrastructure Management Lab	0	0	2	1	NIL	
MMAT501L	Advanced Statistical Methods	2	0	0	2	NIL	
MMAT501P	Advanced Statistical Methods Lab	0	0	2	1	NIL	
Discipline Electives							
MCTM601L	Construction Personnel Management	3	0	0	3	NIL	
MCTM602L	Project Formulation and Appraisal	3	0	0	3	NIL	
MCTM603L	Estimating, Tendering and Bidding	3	0	0	3	NIL	
MCTM604L	Prefabricated Techniques and Management	3	0	0	3	NIL	
MCTM605L	Green Building and Energy Management	3	0	0	3	NIL	
MCTM606L	Automation in Construction Industry	3	0	0	3	NIL	
MCTM607L	Construction Techniques of Deep Foundations	3	0	0	3	NIL	
MCTM608L	Supply Chain Management	3	0	0	3	NIL	
MCTM609L	Flexible and Rigid Pavements	3	0	0	3	NIL	
MCTM610L	Environmental Impact Assessment	3	0	0	3	NIL	
MSTE610L	Repair and Rehabilitation of Structures	3	0	0	3	NIL	
	Project and Internship						
MCTM696J	Study Oriented Project				02	NIL	
MCTM697J	Design Project				02	NIL	
MCTM698J	Internship I/ Dissertation I				10	NIL	
MCTM699J	Internship II/ Dissertation II				12	NIL	

(Annexure 26)

The Academic Council considered and approved the same.

Item 67/23

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Structural Engineering.

The curriculum was approved in the 40^{th} meeting of the Academic Council held on 18^{th} March 2016 [Item No. 40/4.1.a].

Discipline Core Courses								
Course Code	Course Title	L	Т	Р	С	Prerequisite		
MMAT502L	Advanced Mathematical Methods	3	0	0	3	NİL		
MSTE501L	Theory of Elasticity and Plasticity	3	0	0	3	NIL		
MSTE502L	Design of Concrete Structural Systems	3	1	0	4	NIL		
MSTE503L	Structural Dynamics	3	1	0	4	NIL		
MSTE504L	Advanced Design of Steel Structures	2	1	0	3	NIL		
MSTE505L	Finite Element Analysis	2	1	0	3	NIL		
MSTE505P	Finite Element Analysis Lab	0	0	2	1	NIL		
MSTE506L	Prestressed Concrete Structures	2	1	0	3	NIL		
Discipline Electives								
MSTE601L	Matrix Methods of Structural Analysis	2	1	0	3	NIL		
MSTE602L	Design of Bridges	2	1	0	3	NIL		
MSTE603L	Prefabricated Structures	2	1	0	3	NIL		
MSTE604L	Stability of Structures	2	1	0	3	NIL		
MSTE605L	Advanced Concrete Materials and Technology	2	1	0	3	NIL		
MSTE606L	Advanced Foundation Design	3	0	0	3	NIL		
MSTE607L	Earthquake Resistant Design	2	1	0	3	NIL		
MSTE608L	Analysis and Design of Tall Structures	2	1	0	3	NIL		
MSTE609L	Offshore Structures	2	1	0	3	NIL		
MSTE610L	Repair and Rehabilitation of Structures	3	0	0	3	NIL		
MSTE611L	Energy Efficient Buildings	3	0	0	3	NIL		
	Project and Internship							
MSTE696J	Study Oriented Project				02	NIL		
MSTE697J	Design Project				02	NIL		

19 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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MSTE698J	Internship I/ Dissertation I	10	NIL
MSTE699J	Internship II/ Dissertation II	12	NIL

(Annexure 27)

The Academic Council considered and approved the same.

Item 67/24

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Biotechnology.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/5.1.a].

Discipline Core Courses								
Course Code	Course Title	L	Т	Р	С	Prerequisite		
MBIT501L	Advanced Biochemistry	3	0	0	3	NIL		
MBIT501P	Advanced Biochemistry Lab	0	0	2	1	NIL		
MBIT502L	Analytical Techniques in Biotechnology	3	0	0	3	NIL		
MBIT503L	Bioprocess Technology	3	0	0	3	NIL		
MBIT503P	Bioprocess Technology Lab	0	0	4	2	NIL		
MBIT504L	Computational Biology	3	0	0	3	NIL		
MBIT504P	Computational Biology Lab	0	0	2	1	NIL		
MBIT505L	Genetic Engineering	3	0	0	3	NIL		
MBIT505P	Genetic Engineering Lab	0	0	4	2	NIL		
MBIT506L	Immunotechnology	3	0	0	3	NIL		
Discipline Electives								
MBIT601L	Industrial Biotechnology	3	0	0	3	NIL		
MBIT602L	Nanobiotechnology	3	0	0	3	NIL		
MBIT603L	Protein Engineering and Technology	3	0	0	3	NIL		
MBIT604L	Programming for Biologists	3	0	0	3	NIL		
MBIT605L	Food Process Technology	3	0	0	3	NIL		
MBIT606L	Natural Product Technology	3	0	0	3	NIL		
MBIT607L	Plant Biotechnology	3	0	0	3	NIL		
MBIT608L	Animal Biotechnology	3	0	0	3	NIL		
MBIT609L	Pharmaceutical Biotechnology	3	0	0	3	NIL		
MBIT610L	Environmental Biotechnology	3	0	0	3	NIL		
MBIT611L	Aquatic Biotechnology	3	0	0	3	NIL		
MBIT612L	Proteomics	3	0	0	3	· NIL		
MBIT613L	Cancer Biology	3	0	0	3	NIL		
MBIT614L	Medical Biotechnology	3	0	0	3	NIL		
MBIT615L	Microbial Biotechnology	3	0	0	3	NIL		
	Project and Internship							
MBIT696J	Study Oriented Project				02	NIL		
MBIT697J	Design Project				02	NIL		
MBIT698J	Internship I/ Dissertation I				10	NIL		
MBIT699J	Internship II/ Dissertation II				12	NIL		

(Annexure 28)

The Academic Council considered and approved the same.

Item 67/25

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Control and Automation.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/7.3.a].

	Discipline Core Courses					
Course Code	Course Title	L	Т	Р	С	Prerequisite
MCOA501L	Applied Mathematical Methods in Control Engineering	3	1	0	4	NIL
MCOA502L	System Theory	3	0	0	3	NIL

20 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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MCOA502P	System Theory Lab	0	0	2	1	NIL
MCOA503L	Random Variables and State Estimation	3	0	0	3	NIL
MCOA504L	Smart Sensor Systems	3	0	0	3	NIL
MCOA505L	Process Dynamics and Control	3	0	0	3	NIL
MCOA505P	Process Dynamics and Control Lab	0	0	2	1	NIL
MCOA506L	Real Time Embedded Systems	2	0	0	2	NIL
MCOA506P	Real Time Embedded Systems Lab	0	0	2	1	NIL
MCOA507L	Industrial Automation	2	0	0	2	NIL
MCOA507P	Industrial Automation Lab	0	0	2	1	NIL
	Discipline Electives					
MCOA601L	Building Automation	3	0	0	3	NIL
MCOA602L	Industrial Robotics	3	0	0	3	NIL
MCOA603L	Control of Electric Drives	3	0	0	3	NIL
MCOA604L	Machine Learning	2	0	0	2	NIL
MCOA604P	Machine Learning Lab	0	0	2	1	NIL
MCOA605L	Advanced Python Programming	1	0	0	1	NIL
MCOA605P	Advanced Python Programming Lab	0	0	4	2	NIL
MCOA606L	Optimal Control Systems	3	0	0	3	NIL
MCOA607L	Adaptive and Robust Control	3	0	0	3	MCOA502L, MCOA502P
MCOA608L	Discrete Control Systems	3	0	0	3	NIL
MCOA609L	Multivariable Control System	3	0	0	3	NIL
MCOA610L	Industrial Data Networks	3	0	0	3	NIL
MCOA611L	Data Acquisition and Hardware Interfaces	3	0	0	3	NIL
	Project and Internship					
MCOA696J	Study Oriented Project				02	NIL
MCOA697J	Design Project				02	NIL
MCOA698J	Internship I/ Dissertation I				10	NIL
MCOA699J	Internship II/ Dissertation II				12	NIL

(Annexure 29)

The Academic Council considered and approved the same.

Item 67/26

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Power Electronics and Drives.

The curriculum was approved in the 40th meeting of the Academic Council held on 18th March 2016 [Item No. 40/7.3.b].

	Discipline Core Courses								
Course Code	Course Title	L	Т	Р	С	Prerequisite			
MPED501L	Advanced Semiconductor Devices	3	0	0	3	NIL			
MPED502L	Analysis of Power Converters	3	0	0	3	NIL			
MPED502P	Analysis of Power Converters Lab	0	0	2	1	NIL			
MPED503L	Switched Mode Power Supplies	2	0	0	2	NIL			
MPED504L	Generalized Machine Theory	3	1	0	4	NIL			
MPED505L	Industrial Electrical Drives	3	0	0	3	MPED502L, MPED504L			
MPED505P	Industrial Electrical Drives Lab	0	0	2	1	MPED502L, MPED504L			
MPED506L	Special Machines and Control	3	0	0	3	MPED502L			
MPED507L	Advanced Processors for Power Converters	3	0	0	3	NIL			
MPED507P	Advanced Processors for Power Converters Lab	0	0	2	1	NIL			
	Discipline Electives								
MPED601L	Modern Control Theory	3	0	0	3	NIL			
MPED602L	Intelligent Control	3	0	0	3	NIL			
MPED603L	Energy Storage Systems	3	0	0	3	NIL			
MPED604L	Solar Photo Voltaic Systems	3	0	0	3	MPED502L			
MPED605L	Electric and Hybrid Electric Vehicles	3	0	0	3	MPED502L			
MPED606L	Wind Energy Conversion Systems	3	0	0	3	MPED502L			
MPED607L	Microgrid Technologies	3	0	0	3	MPED502L			

21 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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ı	MPED608L	Integrated Circuits for Power Conversion	2	0	0	2	NIL	
l	MPED608P	Integrated Circuits for Power Conversion Lab	0	0	2	1	NIL	
	MPED609L	Power Electronics Applications in Power Systems	3	0	0	3	MPED502L	
	Project and Internship							
	MPED696J	Study Oriented Project				02	NIL	
	MPED697J	Design Project				02	NIL	
l	MPED698J	Internship I/ Dissertation I				10	NIL	
	MPED699J	Internship II/ Dissertation II				12	NIL	

(Annexure 30)

The Academic Council considered and approved the same.

Item 67/27

To consider and approve the revised programme credit structure, curriculum and course contents of Master of Technology in Computer Science and Engineering with Specialization in Cyber Physical Systems.

The curriculum was approved in the 55^{th} meeting of the Academic Council held on 13^{th} June 2019 [Item No. 55/10.2].

	Specialization Electives					
Course Code	Course Title	L	Т	Р	С	Prerequisite
MCSE621L	Control Engineering	3	0	0	3	NIL
MCSE621P	Control Engineering Lab	0	0	2	1	NIL
MCSE622L	Framework of Cyber Physical Systems	3	0	0	3	NIL
MCSE623L	Cyber Physical Systems Design	2	0	0	2	NIL
MCSE623P	Cyber Physical Systems Design Lab	0	0	2	1	NIL
MCSE624L	Real Time Systems	2	0	0	2	NIL
MCSE625L	Fault Tolerant Systems	3	0	0	3	NIL
MCSE626L	Industry 4.0	3	0	0	3	NIL

(Annexure 31)

The Academic Council considered and approved the same.

Item 67/28

To consider and approve the course contents for the courses of Master of Technology in Computer Science and Engineering.

The curriculum was approved in the 66th meeting of the Academic Council held on 16th June 2022 [Item No. 66/9].

	Discipline Core Courses										
Course Code	Course Title	L	T	Р	С	Prerequisite					
MCSE501L	Data Structures and Algorithms	3	0	0	3	NIL					
MCSE501P	Data Structures and Algorithms Lab	0	0	2	1	NIL					
MCSE502L	Design and Analysis of Algorithms	3	0	0	3	NIL					
MCSE502P	Design and Analysis of Algorithms Lab	0	0	2	1	NIL					
MCSE503L	Computer Architecture and Organisation	3	0	0	3	NIL					
MCSE503P	Computer Architecture and Organisation Lab	0	0	2	1	NIL					
MCSE504L	Operating Systems	3	0	0	3	NIL					
MCSE504P	Operating Systems Lab	0	0	2	1	NIL					
MCSE505L	Computer Networks	3	0	0	3	NIL					
MCSE505P	Computer Networks Lab	0	0	2	1	NIL					
MCSE506L	Database Systems	3	0	0	3	NIL					
MCSE506P	Database Systems Lab	0	0	2	1	NIL					
	Project and Internship										
MCSE696J	Study Oriented Project			- 4	02	NIL					
MCSE697J	Design Project				02	NIL					
MCSE698J	Internship I/ Dissertation I				10	NIL					

22 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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MCSE699J Internship II/ Dissertation II 12 NIL

(Annexure 32)

Item 67/29

To consider and approve the course contents for the courses of Master of Technology in Computer Science and Engineering with Specialization in Big Data Analytics.

The curriculum was approved in the 66th meeting of the Academic Council held on 16th June 2022 [Item No. 66/10].

Specialization Electives									
Course Code	Course Title	L	Т	Р	С	Prerequisite			
MCSE614L	Big Data Frameworks and Technologies	2	0	0	2	NIL			
MCSE614P	Big Data Frameworks and Technologies Lab	0	0	2	1	NIL			
MCSE615L	Data Analytics	2	0	0	2	NIL			
MCSE615P	Data Analytics Lab	0	0	2	1	NIL			
MCSE616L	Data Visualization	2	0	0	2	NIL			
MCSE616P	Data Visualization Lab	0	0	2	1	NIL			

(Annexure 33)

The Academic Council considered and approved the same.

The Academic Council considered and approved the same.

Item 67/30

To consider and approve the course contents for the courses of Master of Technology in Computer Science and Engineering with Specialization in Information Security.

The curriculum was approved in the 66th meeting of the Academic Council held on 16th June 2022 [Item No. 66/11].

Specialization Electives									
Course Code	Course Title	L	Т	Р	С	Prerequisite			
MCSE608L	Information Security and Risk Management	3	0	0	3	NIL			
MCSE609L	Cryptosystems	2	0	0	2	NIL			
MCSE609P	Cryptosystems Lab	0	0	2	1	NIL			
MCSE610L	Penetration Testing and Vulnerability Assessment	2	0	0	2	NIL			
MCSE610P	Penetration Testing and Vulnerability Assessment Lab	0	0	2	1	NIL			

(Annexure 34)

The Academic Council considered and approved the same.

Item 67/31

To consider and approve the course contents for the courses of Master of Technology in Computer Science Engineering with Specialization in Artificial Intelligence and Machine learning.

The curriculum was approved in the 66th meeting of the Academic Council held on 16th June 2022 [Item No. 66/12].

Specialization Electives									
Course Code	Course Title	L	T	Р	С	Prerequisite			
MCSE601L	Artificial Intelligence	3	0	0	3	NIL			
MCSE602L	Machine Learning	2	0	0	2	NIL			
MCSE602P	Machine Learning Lab	0	0	2	1	NIL			
MCSE603L	Deep Learning	2	0	0	2	NIL			
MCSE603P	Deep Learning Lab	0	0	2	1	NIL			

(Annexure 35)

The Academic Council considered and approved the same.

23 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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Item 67/32

To consider and approve the removal of Pre-requisite for the course of Bachelor of Technology in Electronics and Communication Engineering and Bachelor of Technology in Electronics and Communication Engineering with Specialization in Biomedical Engineering.

	Discipline Core Course						Proposed
Course Code	Course Title	L	T	Р	С	Prerequisite	Prerequisite
BECE207L	Random Processes	2	1	0	3	BMAT202L, BMAT202P, BECE202L	BECE202L

(Annexure 36)

The Academic Council considered and approved the same.

Item 67/33

To consider and approve the course contents for the courses of Bachelor of Technology in Manufacturing Engineering for the Diploma Holders of TATA Electronics Private Ltd offered under Blended Learning Mode.

The curriculum was approved in the 66th meeting of the Academic Council held on 16th June 2022 [Item No. 66/13].

	Foundation Core Courses					g.			
Course Code	Course Title	L	Т	Р	С	Prerequisite			
WBMF103L	Probability and Statistics	3	0	0	3	NIL			
WBMF108L	Calculus	3	0	0	3	NIL			
WBMF108P	Calculus Lab	0	0	2	1	NIL			
WBMF105L	Engineering Mechanics	2	1	0	3	NIL			
WBMF106P	Engineering Design Visualization Lab	0	0	4	2	NIL			
WBMF107L	Basic Electrical and Electronics Engineering	3	0	0	3	NIL			
WBMF107P	Basic Electrical and Electronics Engineering Lab	0	0	2	1	NIL			
	Humanities, Social Sciences and Manager	nent	Cou	ırses	3				
WBMF104L	Technical English Communication	2	0	0	2	NIL			
WBMF204L	Principles of Management	3	0	0	3	NIL			
	Discipline-linked Engineering Sciences								
WBMF110L	Materials Science and Engineering	3	0	0	3	NIL			
WBMF110P	Materials Science and Engineering Lab	0	0	2	1	NIL			

(Annexure 37)

The Academic Council considered and approved the same.

Item 67/34

To consider and approve the course contents for the courses of Bachelor of Technology in Construction Technology for the Diploma Holders of Larsen&Toubro (L&T) Ltd offered under Blended Learning Mode.

The curriculum was approved in the 66th meeting of the Academic Council held on 16th June 2022 [Item No. 66/14].

Foundation Core Courses									
Course Code	Course Title	L	Т	Р	С	Prerequisite			
WBCT101L	Probability and Statistics	3	2	0	4	NIL			
WBCT102L	Building Materials	3	0	0	3	NIL			
Discipline-Linked Engineering Sciences									
WBCT108L	Mechanics of Solids	3	2	0	4	NIL			
WBCT109E	Surveying	3	0	2	4	NIL			
WBCT110L	Construction Techniques	3	2	0	4	NIL			
	Discipline Core Courses								
WBCT201E	Construction Planning and Control	3	0	2	4	NIL			
WBCT202L	Quality Assurance and Control in Construction	3	2	0	4	NIL			
WBCT203L	Quantity Surveying, Estimation and Contracts	3	2	0	4	NIL			

24 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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	T						(Annexure 38)				
	The Academic (Council considered and approved the same	•				,				
Item 67/35		nd approve the course contents for the Online Learning Institute (VITOL).	course	s of	Вас	chelo	r of Commerce				
	The curriculum was approved in the 64 th meeting of the Academic Council held on 16 th December 2021 [Item No. 64/8].										
	Ability Enhancement Courses										
	Course Code	Course Title	L	Т	Р	С	Prerequisite				
	OLBCO108	Environmental Sciences	3	1	0	4	NIL				
	OLBCO105	Discipline Core Course	s 5	1		6	NIII				
	OLBCO105	Financial Reporting Business Mathematics	5	1	0	6	NIL NIL				
	OLBCO107	Business and Corporate Laws	5	+	0	6	NIL				
	02200101	Business and Corporate Laws		<u> </u>	10		INIL				
	The Academic C	Council considered and approved the same					(Annexure 39)				
Item 67/36		nd approve the course contents for the ered by VIT Online Learning Institute (VITO		s o	f Ba	chelo	or of Computer				
	The curriculum December 2021	was approved in the 64 th meeting of tl [Item No. 64/9].	ne Aca	dem	nic C	ounc	il held on 16 th				
		Ability Enhancement Cour	ses								
	Course Code	Course Title	L	Т	Р	С	Prerequisite				
	OLBCA108	Environmental Sciences	3	1	0	4	NIL				
		Discipline Core Courses	S								
	OLBCA106	Data Structures	5	1	0	6	NIL				
	OLBCA107	Operating Systems	5	1	0	6	NIL				
	The Academic C	ouncil considered and approved the same.					(Annexure 40)				
Item 67/37	Administration of	d approve the course contents for the offered by VIT Online Learning Institute (VIT was approved in the 64 th meeting of the	TOL).								
	December 2021	[Item No. 64/10].									
		Ability Enhancement Cour	ses								
	Course Code	Course Title	L	Т	Р	С	Prerequisite				
	OLBBA108	Environmental Sciences	3	1	0	4	NIL				
		Discipline Core Courses	3								
	OLBBA105	Marketing Management	5	1	0	6	NIL				
	OLBBA107	Business Statistics	5	1	0	6	NIL				
	The Academic C	ouncil considered and approved the same.					(Annexure 41)				
Item 67/38		d approve the course contents for the ered by VIT Online Learning Institute (VITO		es	of N	lastei	r of Computer				
	The curriculum December 2021	was approved in the 64 th meeting of th [Item No. 64/11].	ie Aca	dem	ic C	ounci	il held on 16 th				

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	Discipline Core Course	es				
Course Code	Course Title	L	Т	Р	С	Prerequisite
OLMCA506	Statistics for Data Science	3	1	0	4	NIL
OLMCA507	Computer Networks	3	1	0	4	NIL
OLMCA508	Software Engineering	3	1	0	4	NIL
4	Discipline Electives					
OLMCA601	Artificial Intelligence	3	1	0	4	NIL
OLMCA608	Mobile Application Development	3	1	0	4	NIL

(Annexure 42)

The Academic Council considered and approved the same.

Item 67/39

To consider and approve the course contents for the courses of Master of Business Administration offered by VIT Online Learning Institute (VITOL).

The curriculum was approved in the 64th meeting of the Academic Council held on 16th December 2021 [Item No. 64/12].

9.	Foundation Core Courses					
Course Code	Course Title	L	Т	Р	С	Prerequisite
OLMBA506	Human Resource Management	5	1	0	6	NIL
OLMBA507	Marketing Management	5	1	0	6	NIL
OLMBA508	Operations Management	5	1	0	6	NIL
OLMBA509	Strategic Management	5	1	0	6	NIL
OLMBA510	Financial Management	3	1	0	4	NIL

(Annexure 43)

The Academic Council considered and approved the same.

Item 67/40

To consider and approve the course contents for the courses of Master of Science in Data Science offered by VIT Online Learning Institute (VITOL).

The curriculum was approved in the 65th meeting of the Academic Council held on 17^h March 2022 [Item No. 65/50].

	Discipline Core Courses							
Course Code	Course Title	L	Т	Р	С	Prerequisite		
OLMDS503	Forecasting and Predictive Analytics	3	1	0	4	NIL		
OLMDS504	Statistical Inference	3	1	0	4	NIL		
OLMDS507	Data Structures and Algorithms	3	1	0	4	NIL		
OLMDS508	Data Mining	3	1	0	4	NIL		
OLMDS509	Artificial Intelligence	3	1	0	4	NIL		
Discipline Electives								
OLMDS603	Machine Learning	3	1	0	4	NIL		

(Annexure 44)

The Academic Council considered and approved the same.

Item 67/41

To consider and approve the new online academic programme, curriculum and course contents for the courses of Post Graduate Certificate in Recent Trends of Information Technology offered by VIT Online Learning Institute (VITOL).

Discipline Core Courses									
Course Code	Course Title	L	Т	Р	С	Prerequisite			
OPCIT51L	Algorithms: Design and Implementation	2	0	0	2	NIL			
OPCIT51P	Algorithms: Design and Implementation Lab	0	0	2	1	NIL			
OPCIT52L	Database Systems: Design and Implementation	3	0	0	3	NIL			
OPCIT52P	Database Systems: Design and Implementation Lab	0	0	2	1	NIL			
OPCIT53L	Software Engineering	3	0	0	3	NIL			
OPCIT54L	Internet and Web Programming	3	0	0	3	NIL			

26 | Page Minutes of the 67th meeting of the Academic Council (08.08.2022)

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	OPCIT54P	Internet and Web Programming Lab	0	0	2	1	NIL
	OPCIT61L	Cloud Computing and Virtualization	3	0	0	3	NIL
	OPCIT62L	Software Testing	3	0	0	3	NIL
	OPCIT63L	Computer Programming: Python	2	0	0	2	NIL
	OPCIT63P	Computer Programming: Python Lab	0	0	4	2	NIL
	OPCIT64L	Cyber Security	3	0	0	3	NIL
	OPCIT64P	Cyber Security Lab	0	0	2	1	NIL
	OPCIT69J	Project	0	0	0	12	NIL
Item 67/42	The Academic Council considered and approved the same. Reporting Item: VIT has decided to award Honorary degree in Doctor of Philosophy (Honoris Causa) to Professor Dr. Sethuraman Panchanathan, Director, National Science Foundation, USA, for his outstanding Scientific contributions during the 37 th Annual Convocation.						
						ĺ	(Annexure 46)
	Noted.						
Item 67/43	Vote of thanks						

Dr. M. Anthony Xavior Dean Academics, Vellore Institute of Technology Vellore – 632014 Dr. M. Anthony Xavior

Dean (Academics)

Vellore Institute of Technology (VIT) **Deemed to be University under section 3 of UGC Act, 1956** Vellore-632 014, Tarmi Madu, India

Dr. Jayabarathi. T Secretary, Adademic Council

Registrar, Vellore Institute of Technology

Vellore - 632014

REGISTRAR

Vellore Institute of Technology (VIT) (Decement to the University under section 3 of UGC Act, 1956) Vellere-632 014, Tamil Natu, India

Riskodale Dr. Rambabu Kodali

Chairperson, Academic Council Vice Chancellor, Vellore Institute of Technology Vellore - 632014

Vice Chancellor Vellore Institute of Technology (VIT Vellore - 632 014, Tamil Nad