



## Minutes of the 61<sup>st</sup> Meeting of the Academic Council

(18th February 2021 | 11.00 am | Vellore Campus | Zoom Online Mode)

### **Members Present:**

1. Dr. Rambabu Kodali, Vice Chancellor
2. Dr. N. Lalitha, Educational Consultant, Chennai
3. Dr. K. Giridhar, Professor, EE Dept., IIT Madras, Chennai
4. Mr. Lakshminarayanan, CTS, Chennai
5. Dr. K.V.S. Hari, Professor, Dept. of ECE, Indian Institute of Science, Bangalore
6. Mr. Lawrence Mohanraj, Leader - - Student Developer Advocacy, IBM India Pvt. Ltd, Chennai
7. Dr. S. Narayanan, Pro-Vice Chancellor [VLR]
8. Dr. V. S. Kanchana Bhaaskaran, Pro-Vice Chancellor [CC]
9. Dr. K. Sathiyarayanan, Registrar
10. Dr. G. Jayaraman, Dean, Academics [VLR]
11. Dr. A. Mary Saral, Dean, SAS
12. Dr. V. Pragasam, Dean, SBST
13. Dr. S. Shantha Kumar, Dean, SCE
14. Dr. Shishir Kumar Behera, Dean, SCHEME
15. Dr. R. Saravanan, Dean, SCOPE
16. Dr. S. Sivabalan, Dean, SELECT
17. Dr. R. Vasudevan, Dean, SMEC
18. Dr. G. Velmurugan, Dean, SSL
19. Dr. P. Subhashree, Dean, VITBS
20. Dr. S. Babu, Dean, VAIAL
21. Dr. Saleem Ahmed, Dean, V-SIGN
22. Prof. Jaffer AA Khan, Director, School of Architecture
23. Dr. Mahindrakar Amit Baburao, Director, Students' Welfare
24. Dr. P. Ramesh Babu, Dean, Academics Research
25. Dr. G. Mohan Ganesh, COE
26. Dr. Savojit Ganguly, Asst. Dean, School of Hotel and Tourism Management
27. Dr. V. Samuel Rajkumar, Director, PAT
28. Dr.G. Kalaichelvan, Director, UG Admissions
29. Dr. K. Devendranath Ramkumar, Professor, SMEC
30. Dr. A. Sivakumar, Professor, VITBS
31. Prof. S. Sankar Ganesh, Asst. Professor (Senior), SENSE
32. Dr. A. Nayeemulla Khan, Dean, Academics [CC]
33. Dr. Kalyani Desikan, Dean, Academic Research [CC]
34. Dr. Indra Rajasingh, Dean, SAS [CC]
35. Dr. A. Peer Fathima, Dean, SELECT [CC]
36. Dr. A. Siva Subramanian, Dean, SENSE [CC]
37. Dr. M. Gandhi, Dean, VIT School of Law [CC]
38. Dr. R Sivakumar, Dean, SMEC [CC]
39. Dr. S.K. Sudarsanam, Dean, VITBS [CC]
40. Dr. K. Muthumani, Dean, SCE [CC]
41. Dr. Saradha Rajkumar, Dean, SSL [CC]

42. Dr. V. Sugumaran, Dy. COE [CC]
43. Ms. Snuhee Roy (17BEE0357) Student Council Member
44. Mr. Abhishek Kumar Singh (18BCE2509) Student Council Member

**Special Invitee:**

1. Dr. S. Geetha, Associate Dean, SCOPE [CC]
2. Dr. A. Selvakumar, HoD, VFIT [CC]

**Leave of Absence:**

1. Shri. Jaji Vijayaraman, R&D Director, Valeo India Private Limited, Chennai
2. Mr. Arindam Sen (alumnus of B.E. ECE, 2000 batch), Partner, EY, Bengaluru
3. Dr. Kittur Harish Mallikarjun, Dean, SENSE
4. Dr. Balakrushna Tripathy, Dean, SITE
5. Dr. V. Ramasubramanian, Director, PG Admissions
6. Dr. K.P.S.K. Illanthenral, Asst. Professor, SCOPE
7. Dr. K. R. Prabhu, Assoc. Professor, SELECT
8. Dr. R. Jagadeesh Kannan, Dean, SCOPE [CC]

**Item 61. 1.** Welcome Address:  
Vice Chancellor welcomed all the members of the Academic Council.

**Item 61. 2.** Honorable Chancellor's remark:  
Honorable Chancellor emphasized that non-engineering programmes should be strengthened.

**Item 61. 3.** **Dr. G. Jayaraman, Dean (Academics), Vellore Campus moved the following:**

Item 61.3.1. To consider and confirm the Minutes of the 60<sup>th</sup> meeting of the Academic Council.

Confirmation proposed by Dean Academics, Chennai Campus and seconded by Pro-Vice Chancellor, Vellore Campus.

*Decision:* Agenda Item 61.3.1. Approved.

Item 61.3.2. To consider and approve the programmes to be introduced from AY 2021-22.

Vellore Campus – 4 Programmes  
M.Sc. (Integrated) Physics  
M.Sc. (Integrated) Chemistry  
M.Sc. (Integrated) Mathematics  
Master in Social Work

Chennai Campus – 5 Programmes  
B.Tech. Mechanical Engineering with specialisation in Electrical Vehicles  
M.Tech. (Integrated) Construction Technology and Management  
B.Sc. Mathematics and Computing  
B.Com. (Honours) Bachelors of Commerce  
B.Sc. Physics, Chemistry and Mathematics with two majors and one ancillary

*Decision:* Agenda Item 61.3.2. Approved.

Item 61.3.3. To consider and ratify the changes in academic processes in Fall Semester 2020-21 followed due to pandemic situation.

*Decision: Agenda Item 61.3.3. Approved.*

Item 61.3.4. Reporting the recommendations of the Institutional Academic Programmes Advisory Committee on revision of curriculum and programme structure for B.Tech. programmes

**Item 61.4. Dr. G. Velmurugan, Dean, (SSL) Vellore Campus, moved the following.**

Item 61.4.1.A. To consider and approve the syllabus of the following four foreign language courses to be offered in B.Com., B.Sc., BBA, BCA, BHM and M. Sc. 5 year Integrated programmes.

- ESP1003 Basic Spanish
- GER1003 Basic German
- CHI1002 Basic Chinese
- JAP1002 Basic Japanese

*Decision: Agenda Item 61.4.1.A. Approved*

**Item 61.5. Dr. R. Saravanan, Dean, (SCOPE) Vellore Campus, moved the following.**

Item 61.5.1.A. To consider and approve the syllabus for the following 24 courses offered in B. Tech. Computer Science and Engineering and Business Systems [In collaboration with TCS].

(Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019).

**University Core – 7 Courses**

- ENG1017 Business Communication & Value Science – III
- ENG1018 Business Communication & Value Science – IV
- MGT2001 Introduction to Innovation, IP Management and Entrepreneurship
- CBS1901 Technical Answers for Real World Problems
- CBS1902 Industrial Project
- CBS1903 Comprehensive Examination
- CBS1904 Capstone Project

**Programme Core – 5 Courses**

- CBS2003 Design Thinking
- CBS3003 Design and Analysis of Algorithms
- CBS3004 Artificial Intelligence
- MGT2003 Financial Management
- MGT2002 Marketing Research and Marketing Management

**Programme Elective – 12 Courses**

- CBS3005 Cloud, Micro services & Applications

- CSE3006 Machine Learning
- CBS3007 Data Mining and Analytics
- CBS4001 Robotics and Embedded Systems
- CBS3008 Introduction to IoT
- CBS4002 Cryptology and Analysis
- CBS4003 Quantum Computation & Quantum Information
- CBS3009 Advanced Social, Text and Media Analytics
- CBS3010 Mobile Computing
- CBS4004 Image Processing and Pattern Recognition
- MGT3001 Business Strategy
- MGT3002 Advanced Finance

*Decision:* Agenda Item 61.5.1.A. Approved.

Item 61.5.1.B. To consider and approve the change in credit distribution for the following 4 Programme Elective Courses. (*Syllabus not submitted for approval for existing credits.*)

Course code	Course Title	Existing					Proposed				
		L	T	P	J	C	L	T	P	J	C
CBS3008	Introduction to IoT	3	0	0	4	4	3	0	2	0	4
CBS3010	Mobile computing	3	0	0	4	4	3	0	2	0	4
CBS3007	Data Mining and Analytics	3	0	0	4	4	3	0	2	0	4
CBS4001	Robotics and Embedded Systems	3	0	0	4	4	3	0	2	0	4

*Decision:* Agenda Item 61.5.1.B. Approved.

Item 61.5.2.A. To consider and approve the syllabus for the following 20 courses offered in B.Tech. Computer Science and Engineering with Specialization in Internet of Things.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

#### Programme Core – 6 Courses

- CSE2031 Principles of Database Management System
- CSE2015 Internet Programming and Web Technologies
- CSE2016 Microprocessor and Microcontrollers
- CSE3035 Principles of Cloud Computing
- BCT3002 Embedded System Architecture and Design
- ECE3051 Analog and Digital Signal Processing

#### Programme Elective - 14 Courses

- BCT4001 Sensors and Actuator Devices
- BCT3004 Privacy and Security in Internet of Things

- BCT3005 Fundamentals of Fog and Edge Computing
- BCT3006 Industrial and Medical Internet of Things
- BCT3007 Programming for Internet of Things Boards
- BCT3008 Software Defined Networks
- BCT4002 Architecting Smart Internet of Things Devices
- BCT4003 Wearable Computing
- BCT4004 Design of Smart Systems
- BCT4005 Design of Smart Cities
- BCT4006 Cognitive Internet of Things
- BCT4007 Applications of Internet of Things in Robotics
- BCT4008 Mobile Application Development for Internet of Things
- BCT4009 Internet of Things Architectures and its Protocol

*Decision: Agenda Item 61.5.2.A. Approved.*

Item 61.5.2.B. To consider and approve the change in credit distribution for the programme elective course. *(Syllabus not submitted for approval for existing credit)*

Course code	Course Title	Existing					Proposed				
		L	T	P	J	C	L	T	P	J	C
BCT4001	Sensors and Actuator Devices	3	0	0	0	3	3	0	2	0	4

*Decision: Agenda Item 61.5.2.B. Approved.*

Item 61.5.3.A. To consider and approve the withdrawal of the following 39 Programme Elective courses offered in B.Tech. Computer Science and Engineering with Specialization in Bioinformatics.

(Curriculum was approved in the 37<sup>th</sup> Meeting of the Academic Council held on 16.06.2015).

**Programme Elective – 39 Courses**

- CSE3003 Microkernel OS
- CSE3004 Storage Technologies
- CSE3005 Advanced Computer architecture
- CSE3007 Foundation Skills in Product Development
- CSE3008 Integrated Digital Design
- CSE3010 Real Time Systems
- CSE3012 Algorithms for Computational Biology
- CSE3014 Bio Inspired Computing
- CSE3015 Business Intelligence
- CSE3017 Computer Vision
- CSE3023 Speech Technology
- CSE3026 E-Learning Technologies
- CSE3027 Electronic and Mobile Commerce

- CSE3028 Functional Programming
- CSE3030 Open Source Software
- CSE3031 Software Testing
- CSE3032 Software Project Management
- CSE3033 Web Security
- CSE4002 Adhoc Wireless Networks
- CSE4005 Green and Energy aware Computing
- CSE4006 Haptic Technology
- CSE4007 Mobile Computing
- CSE4008 Mobile Pervasive Computing
- CSE4009 Network Management System
- CSE4010 Parallel Algorithms
- CSE4012 Digital Signal Processing
- CSE4013 Embedded Programming
- CSE4016 Multi-Core Architecture and Operating System
- CSE4017 Software Hardware Co-Design
- CSE4018 Advanced Analytics
- CSE4021 Modelling and Simulation
- CSE4023 Pattern Recognition
- CSE4024 Advanced Java Programming
- CSE4025 Design Patterns
- CSE4026 Intelligent Tutoring Systems
- CSE4029 Quantum Computing
- CSE4030 Abstraction and its Applications
- CSE4031 Game Theory
- CSE4032 Search Technologies

*Decision:*                      *Agenda Item 61.5.3.A. Deferred.*

Item 61.5.3.B.              To consider and approve the introduction of anti-requisite for the following 10 courses.

<b>Course Code and Title</b>	<b>Anti-Requisite</b>
CSE1003-Digital logic and Design	ITE1001-Digital logic & Microprocessor
CSE1005-Software Design and Development	ITE1005-SE Principles and practices CSE3001-Software Engineering
CSE2003-Data Structures and Algorithms	ITE1004- Data Structures and Algorithms
CSE2004-Database Management Systems	ITE1003-Database Management systems
CSE2005-Operating Systems	ITE2002-Operating Systems
BIT3002-Molecular Modelling and Drug Design	BIT4003- Molecular Modelling and Drug Design
CSE2002-Theory of Computation & compiler Design	ITE1006-Theory of Computation CSE2013-Compiler Design
CSE3016-Computer Graphics and Multimedia	ITE1011-Computer Graphics

CSE4015-Human Computer Interaction	ITE1014- Human Computer Interaction
CSE4028-Object oriented Software Development	ITE1007-Object Oriented Analysis and Design

*Decision: Agenda Item 61.5.3.B. Approved.*

Item 61.5.4.A. To consider and approve the syllabus for the following 23 courses offered in B.Tech. Computer Science and Engineering with Specialization in Data Science.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019]

**Programme Core – 6 Courses**

- CSE2031 Principles of Database Management Systems
- CSE2015 Internet Programming and Web Technologies
- CSE3044 Cryptography and Network Security
- CSE3045 Mathematical Modeling for Data Science
- CSE3046 Programming for Data Science
- CSE3047 Predictive Analytics

**Programme Elective – 17 Courses**

- CSE3050 Data Visualization and Presentation
- CSE3048 Computer Graphics
- CSE3035 Principles of Cloud Computing
- CSE3049 Distributed Computing Systems
- CSE2016 Microprocessor and Microcontrollers
- CSE4007 Mobile Computing
- CSE3052 Software Quality and Testing
- CSE3092 Advanced Java Programming
- CSE3093 Nature Inspired Computing
- CSE3051 Open Source Programming
- BCD3001 Bayesian Data Analysis
- CSE3053 Big Data Analytics
- BCD3002 Business Intelligence and Analytics
- BCD3003 Cognitive Systems
- CSE3054 Data Mining: Concepts and Techniques
- BCD3004 Data Modeling and Simulation
- CSE3055 Deep Learning

*Decision: Agenda Item 61.5.4.A. Approved.*

- Item 61.5.5.A. To consider and approve the syllabus for the following 34 courses offered in M.Tech. (Integrated) Computer Science and Engineering with Specialization in Data Science.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

**Programme Core - 17 Courses**

- CSI2003 Advanced Algorithms
- CSI2004 Advanced Database Management Systems
- CSI2005 Principles of Compiler Design
- CSI2007 Data Communication and Networks
- CSI2008 Programming in Java
- CSI2006 Microprocessor and Interfacing Techniques
- CSI3001 Cloud Computing Methodologies
- CSI1007 Software Engineering Principles
- CSI3002 Applied Cryptography and Network Security
- CSI3003 Artificial Intelligence and Experts System
- MDI3001 Advances in Web Technologies
- MDI3002 Foundations of Data Science
- CSI3004 Data Science Programming
- MDI4001 Machine Learning for Data Science
- CSI3005 Advanced Data Visualization Techniques
- CSI2001 Digital Logic and Computer Design
- CSI2002 Data Structures and Algorithm Analysis

**Programme Elective - 17 Courses**

- CSI3006 Soft Computing Techniques
- CSI3007 Advanced Python Programming
- CSI3008 Internet of Everything
- CSI3009 Advanced Wireless Networks
- CSI3010 Data Warehousing and Data Mining
- CSI3011 Computer Graphics and Multimedia
- CSI3012 Distributed Systems
- CSI3013 Blockchain Technologies
- CSI3014 Software Verification and Validation
- CSI3015 Software project Management
- CSI3016 Robotics: Machines and Controls
- CSI3017 Business Intelligence
- CSI3018 Advanced Java
- CSI3019 Advanced Data Compression Techniques
- CSI3020 Advanced Graph Algorithms
- CSI3021 Advanced Computer Architecture
- CSI3022 Cyber Security and Application Security

*Decision:*

*Agenda Item 61.5.5.A. Approved.*

Item 61.5.5.B. To consider and approve the revision of syllabus for the programme elective course.

Course code	Course Title	Existing					Proposed				
		L	T	P	J	C	L	T	P	J	C
CSI1005	User Interface Design	3	0	0	0	3	2	0	2	0	3

*Decision:* Agenda Item 61.5.5.B. *Approved.*

Item 61.5.6.A To consider and approve the syllabus for the following 36 courses offered in M.Tech. (Integrated) Computer Science and Engineering (In collaboration with VIRTUSA).

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

**Programme Core – 17 Courses**

- CSI2003 Advanced Algorithms
- CSI2004 Advanced Database Management Systems
- CSI2005 Principles of Compiler Design
- CSI2007 Data Communication and Networks
- CSI2008 Programming in Java
- CSI2006 Microprocessor and Interfacing Techniques
- CSI3001 Cloud Computing Methodologies
- CSI1007 Software Engineering Principles
- CSI3002 Applied Cryptography and Network Security
- CSI3003 Artificial Intelligence and Experts System
- CSI3029 Front End Design and Testing
- CSI3023 Advanced Server side Programming
- CSI3024 Software Application Architecture
- CSI3025 Application Development and Deployment Architecture
- CSI3026 Machine Learning
- CSI2001 Digital Logic and Computer Design
- CSI2002 Data Structures and Algorithm Analysis

**Programme Elective – 19 Courses**

- CSI3006 Soft Computing Techniques
- CSI3007 Advanced Python Programming
- CSI3008 Internet of Everything
- CSI3009 Advanced Wireless Networks
- CSI3010 Data Warehousing and Data Mining
- CSI3011 Computer Graphics and Multimedia
- CSI3012 Distributed Systems
- CSI3013 Blockchain Technologies
- CSI3014 Software Verification and Validation
- CSI3015 Software project Management

- CSI3016 Robotics: Machines and Controls
- CSI3027 R Programming
- CSI3028 Deep Learning
- CSI3021 Advanced Computer Architecture
- CSI3020 Advanced Graph Algorithms
- CSI3022 Cyber Security and Application Security
- MDI3002 Foundations of Data Science
- CSI3005 Advanced Data Visualization Techniques
- CSI3019 Advanced Data Compression Techniques

*Decision: Agenda Item 61.5.6.A. Approved.*

**Item 61.6. Prof. Jaffer AA Khan, Director, School of Architecture, Vellore Campus, moved the following.**

Item 61.6.1.A. To consider and approve the revised curriculum of Bachelor of Architecture to be offered from the Academic Year 2021-2022.

[Curriculum was approved in the 60<sup>th</sup> Meeting of the Academic council held on 05.11.2020].

*Decision: Agenda Item 61.6.1.A. Approved.*

**Item 61.7. Dr. A. Mary Saral, Dean, (SAS), Vellore Campus, moved the following.**

Item 61.7.1.A. To consider and approve the syllabus for the following 3 courses offered in M.Sc. (5 Year Integrated) Computational Statistics and Data Analytics.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

**Programme Core – 3 Courses**

- MAT1028 Operations Research for Data Analysis
- MAT1029 Statistical Quality Control
- MAT1030 Statistical Computing for Data Analysis
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*Decision: Agenda Item 61.7.1.A. Approved.*

**Item 61.8. Dr. Saleem Ahmed, Dean, (V-SIGN), Vellore Campus, moved the following.**

Item 61.8.1.A. To consider and approve the syllabus for the following 3 courses offered in B. Des. (Industrial Design).

[Curriculum was approved in the 49<sup>th</sup> Meeting of the Academic Council held on 15.03.2018].

### **Programme Elective – 3 Courses**

- BDE1016 Collaborative Design Project
- MGT1055 Design Management
- MGT1054 Product Planning and Strategy

*Decision: Agenda Item 61.8.1.A. Approved.*

Item 61.8.1.B. To consider and approve the syllabus for the following 28 courses offered in B. Sc. Visual Communication.

[Curriculum was approved in the 58<sup>th</sup> Meeting of the Academic Council held on 26.02.2020].

### **University Core – 2 Courses**

- BVI3098 Comprehensive Examination
- BVI3099 Capstone Project

### **Programme Core – 6 Courses**

- BVI1009 Media Laws and Ethics
- BVI2003 Digital Film Making
- BVI2004 Communication Theories - Methods and Practices
- BVI1010 Audio Production and Broadcasting
- BVI2005 Television Production
- BVI2006 Video Editing

### **Programme Elective - 20 Courses**

- BVI1011 Digital Journalism
- BVI1012 Media Culture and Society
- BVI1013 Media Psychology
- BVI2007 Writing for Media
- BVI1014 Media Management
- BVI1015 New Media
- BVI2008 2D and 3D Visualization
- BVI2009 Advertisement Production
- BVI2010 Casting Direction
- BVI3001 Advanced Film Production
- BVI3002 Film Direction
- BVI2011 Professional Photography
- BVI2012 Advertisement Photography
- BVI3003 Web Production and Publishing
- BVI3004 Printing and Publishing
- BVI3005 Concept Art
- BVI3006 Art Direction
- BVI2013 Sound Design
- BVI2014 Sound Production
- BVI3007 Portfolio Production

*Decision: Agenda Item 61.8.1.B. Approved.*

**Item 61.9. Dr. M. Gandhi, Dean, (VITSOL), Chennai Campus, moved the following.**

**Item 61.9.1.A. To consider and approve the syllabus for the following 25 courses offered in BA LLB (Honours), BBA LLB (Honours).**

[Curriculum was approved in the 33<sup>rd</sup> Meeting of the Academic Council held on 05.09.2014].

**Optional – 9 courses**

- LAW5017 Business and Human Rights
- LAW5028 Constitutional Interpretation and Social Justice
- LAW5009 Discretionary Justice and Rule of Law
- LAW5025 Global Administrative Law
- LAW5026 Government Regulation Of Industry
- LAW5023 Rights of the Accused under National and International Legal System
- LAW5014 Scientific Evidence In Criminal Trial
- LAW5001 Sports Law
- LAW5015 Trade in Intellectual property

**Honours – 16 Courses**

- LAW4010 Citizenship & Emigration Law
- LAW4065 Comparative Criminal Procedure
- LAW4048 Competition Law
- LAW4052 Equity and Trust
- LAW4066 Financial and Systemic fraud
- LAW4039 Financial Market Regulation
- LAW4003 Gender Justice and Feminist Jurisprudence
- LAW4017 International Dispute Resolution Bodies
- LAW4021 International refugee law
- LAW4035 IPR in Pharma Industry
- LAW4041 Law of Carriage
- LAW4055 Law on Infrastructure Development
- LAW4053 Law on Project Finance
- LAW4061 Offences against Child & Juvenile offence
- LAW4058 Prison Administration
- LAW4064 Probation And Parole

*Decision: Agenda Item 61.9.1.A. Approved.*

**Item 61.9.1.B. To consider and approve the introduction of 3 elective courses.**

- LAW5041 Energy Law (Programme elective)
- LAW6114 Defense and Strategic Studies (University elective)
- LAW6115 Indian Legal System (University elective)

*Decision: Agenda Item 61.9.1.B. Approved.*

Item 61.9.1.C. To consider and approve the withdrawal of 39 Optional and Honours Courses.

**Optional - 14 courses**

- LAW5003 Gender and the Law
- LAW5006 Negotiation Workshop
- LAW5008 Transnational Crimes
- LAW5012 Science, Technology and Human Rights
- LAW5013 Criminal Evidence
- LAW5018 Human Rights and the Indian legal system
- LAW5019 European Convention on Human Rights
- LAW5020 Human Rights and Weaker Sections
- LAW5021 Human Experimentation – Human Rights Issues in Clinical Drug Trials
- LAW5027 Diplomatic and Consular Relations
- LAW5029 Medical Jurisprudence
- LAW5030 Law and behaviour in Cyber Space
- LAW5031 International Human Rights Law and Humanitarian Law
- LAW5033 Digital Forensics

**Honours – 25 Courses**

- LAW4001 Affirmative Action and Discriminative Justice
- LAW4007 Civil Society and Public grievance
- LAW4012 International Arbitration
- LAW4013 International Court of Justice
- LAW4016 International Labour Organization and Labour Laws
- LAW4023 Patent Right creation and Registration
- LAW4024 IPR Management
- LAW4025 Copyright
- LAW4026 Trade Mark and Design
- LAW4027 Trade Secret and Technology transfer
- LAW4028 Other Forms of IPR creation and registration
- LAW4029 IPR Litigation
- LAW4030 IPR Transactions
- LAW4034 Information Technology
- LAW4036 IPR in SMEs
- LAW4040 Foreign Trade
- LAW4042 Transportation Law
- LAW4047 Merger and Acquisition
- LAW4049 Information Technology Law
- LAW4050 Direct Taxation
- LAW4051 Indirect Taxation
- LAW4054 Law on Corporate Finance
- LAW4056 Securities
- LAW4057 Forensic Science
- LAW4063 IT Offences

*Decision:*

*Agenda Item 61.9.1.C. Approved.*

- Item 61.9.1.D. To consider and ratify the introduction of Post graduate programmes in Law offered from Academic Year 2020-21 onwards
- LLM Corporate Law
  - LLM International Law and Development
  - LLM Intellectual Property Law

*Decision:* *Agenda Item 61.9.1.D. Approved.*

**Item 61.10. Dr. S. Geetha, Associate Dean, (SCOPE), Chennai Campus, moved the following.**

- Item 61.10.1.A. To consider and approve the syllabus for the following 21 courses offered in B. Tech. Computer Science and Engineering with Specialization in Artificial Intelligence and Robotics.

[Curriculum was approved in the 59<sup>th</sup> Meeting of the Academic Council held on 24.09.2020].

**Programme Core – 4 Courses**

- MAT2010 Mathematical Methods for Computer Vision, Robotics, and Graphics
- ECE2036 Signal Processing in Robotics
- CSE1022 Foundations of Robotics: kinematics, Dynamics and Motion Control
- CSE1023 Robot Vision

**Programme Elective – 17 Courses**

- CSE1025 Robot Programming
- CSE1026 Humanoid Robotics
- CSE1027 Nano and Neuro-robotics
- CSE1028 Drone Applications, Components and Assembly
- CSE2017 Speech and Language Processing
- CSE2018 Medical Robotics
- CSE2019 Internet of Things
- CSE2022 Cyber Physical Systems
- CSE2025 Machine Diagnostics and Condition Monitoring
- CSE2023 Robotic Process Automation
- CSE2024 Advanced RPA developer
- CSE3056 Knowledge Representation and reasoning
- CSE3057 Reinforcement Learning
- CSE3058 Cognitive Robotics
- CSE3059 Drones and Autonomous Systems
- CSE3060 Robotics Based Industrial Automation
- CSE1016 Deep Learning Principles and Practices

*Decision:* *Agenda Item 61.10.1.A. Approved.*

- Item 61.10.2.A. To consider and approve the syllabus for the following 18 courses offered in B.Tech. Computer Science and Engineering with Specialization in Artificial Intelligence and Machine Learning.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

**Programme Elective - 18 Courses**

- CSE4048 Soft Computing in Medical Diagnostics
- CSE4049 Speech and Language Processing using Deep Learning
- CSE3061 Artificial Intelligence for Cyber security
- CSE4053 Malware Analysis in Data science
- CSE4054 Artificial Intelligence in Block chain
- CSE4055 Cyber Threat Intelligence
- CSE4056 Intelligent Multi agents and expert systems
- CSE4057 Network science and modeling
- CSE4058 Business Intelligence
- CSE4059 Cognitive Systems
- CSE4060 Intelligent Robots and Drone Technology
- CSE4062 Knowledge representation
- CSE4063 Reinforcement Learning
- CSE4064 Event processing and correlation systems
- CSE3062 IoT for smart cities
- CSE4051 Predictive Analytics and IoT
- CSE4052 Smart Product Development
- CSE4065 Modelling and Simulation of Digital Systems

*Decision: Agenda Item 61.10.2.A. Approved.*

- Item 61.10.3.A. To consider and approve the syllabus for the following 3 courses offered in M.Tech. Computer Science and Engineering with Specialization in Artificial Intelligence and Machine Learning.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

**Programme Elective - 3 Courses**

- CSE6074 Artificial Intelligence for Cyber Security
- CSE6037 Deep Learning and its Applications
- CSE6076 Predictive Analytics

*Decision: Agenda Item 61.10.3.A. Approved.*

- Item 61.10.4.A. To consider and approve the syllabus for the following 24 courses offered in B.Tech. Computer Science and Engineering with Specialization in Cyber Physical Systems.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019]

### **Programme Core – 1 Course**

- CSE2034 CPS System Design

### **Programme Elective – 23 Courses**

- CSE3080 Cryptography & Network Security
- CSE3063 Software Engineering Principles
- CSE4080 Blockchain Technology
- CSE3064 Smart Sensors for Healthcare
- CSE3065 Bio Medical Signal Processing (New)
- CSE4070 Brain Computer Interface
- CSE4071 Wearable Health Monitoring Devices
- CSE3070 Machine Learning and its Applications
- CSE4072 Security and Privacy of CPS
- CSE3071 Next Generation Networks
- CSE3072 CPS Assurance
- CSE3073 Control Discrete Event Systems
- CSE3074 Computer Controlled Systems
- CSE3075 Machine Vision
- CSE3076 Context-Aware Computing
- CSE3077 Internet of Things for Smart Cities
- CSE3078 Smart Farming and Agriculture
- CSE3079 Smart Infrastructure
- CSE4073 CPS for Internal and External Security
- MEE3023 Robotics and Programming
- MEE2068 Intelligent Manufacturing Automation
- ECE4034 Medical Robotics
- EEE3010 E-Vehicles

*Decision: Agenda Item 61.10.4.A. Approved.*

Item 61.10.5.A. To consider and approve the syllabus for the following 13 courses offered in M.Tech. Computer Science and Engineering with Specialization in Cyber Physical Systems.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

### **Programme Elective – 13 Courses**

- CSE5022 Machine Learning for CPS
- CSE5023 Cyber Security
- CSE5024 Cloud Computing
- CSE5025 Heterogeneous Networking
- CSE6077 Network-on-Chip
- CSE6078 Software Defined Networks
- CSE6079 Real Time Systems
- CSE6080 Fault-Tolerant Systems
- CSE6081 High Performance Communication Networks
- CSE6082 Smart Health Technology

- CSE6083 Smart Transportation Systems
- ECE5076 Data Acquisition Systems
- MEE5031 Digital Manufacturing and Factory Automation

*Decision: Agenda Item 61.10.5.A. Approved.*

Item 61.10.6.A. To consider and approve the syllabus for the following 24 courses offered in M.Tech. (Integrated) Computer Science and Engineering with Specialization in Business Analytics.

[Curriculum was approved in the 55<sup>th</sup> Meeting of the Academic Council held on 13.06.2019].

**Programme Elective - 8 Courses**

- CSE3066 Internet of Things
- CSE4066 Speech Processing
- CSE4067 Bioinformatics
- CSE4068 Healthcare Analytics
- CSE4069 Social Media Analytics
- CSE3067 Text & Web Mining
- CSE3068 Sequential and Spatial data mining
- CSE3069 Real-Time Analytics

**Programme Elective (Management) – 16 Courses**

- MGT3003 Customer Relationship Management
- MGT3004 Digital and Social Media Marketing
- MGT3005 Marketing Analytics
- MGT3006 Neuro Marketing
- MGT4001 Product Lifecycle Management
- MGT3007 Retail Analytics
- MGT3008 HR Analytics
- MGT3009 Behavioral Analytics
- MGT3010 Accounting Analytics
- MGT3011 Econometrics
- MGT3012 Financial Analytics
- MGT4002 Investment and Banking analytics
- MGT3013 Risk and Fraud Analytics
- MGT4003 Lean Six Sigma Principles
- MGT3014 Operations Analytics
- MGT3015 Supply Chain Analytics

*Decision: Agenda Item 61.10.6.A. Approved.*

Item 61.10.7.A To consider and ratify the change in credit structure for the elective courses in M.Tech. Computer Science and Engineering with Specialization in Business Analytics (5Year Integrated).

### **Programme Electives**

- Digital Image processing (SWE1010) credit distribution to be changed to (2 0 2 4 4) instead of (3 0 0 4 4).
- Natural Language Processing (SWE1017) credit distribution to be changed to (3 0 0 4 4) instead of (2 0 0 4 3).

*Decision: Agenda Item 61.10.7.A. Approved.*

Item 61.10.8.A To consider and ratify the change in course title for the courses in B. Tech. Computer Science and Engineering with Specialization in Artificial Intelligence and Machine Learning.

### **Programme Electives (PE)**

- Speech and Language processing for text to be renamed as Speech and language processing using deep learning.
- Reinforcement and Ensemble Learning to be renamed as Reinforcement Learning.
- Credits distribution of Modeling and Simulation of Digital Systems (2 0 0 0 2) to be changed to (2 0 2 0 3).

*Decision: Agenda Item 61.10.8.A. Approved.*

Item 61.10.9.A To consider and ratify the change in course title for the courses in M. Tech. Computer Science and Engineering with Specialization in Cyber Physical Systems.

- CSE6084 Data Acquisition of Hardware to be renamed as Data Acquisition Systems

*Decision: Agenda Item 61.10.9.A. Approved.*

**Item 61.11. DR. R. Sivakumar, Dean, SMEC, (Chennai Campus), moved the following.**

Item 61.11.1.A. To consider and approve the syllabus for the following 40 courses offered in B. Tech. Mechatronics and Automation.

[Curriculum was approved in the 59<sup>th</sup> Meeting of the Academic Council held on 24.09.2020].

### **Programme Core - 10 Courses**

- EEE2009 Electrical Actuators and Drives
- MHA2001 Industrial Automation and Programmable Controllers
- MHA2002 Mechanisms and Design Concepts
- MHA2003 Fluid Power Automation
- MHA2004 Sensors and Instrumentation
- ECE2038 Digital Electronics and Microcontrollers
- MHA3001 Modelling and Control of Mechatronic Systems
- MHA3002 System Integration and Design
- MHA2005 Machining and Manufacturing Processes
- MHA3003 Robotic systems

### **Programme Elective – 30 Courses**

- MHA2006 Thermodynamics and its applications
- MHA2007 Additive Manufacturing Systems
- MHA2008 Smart Materials
- MHA2009 Geometrical Modelling and Simulation
- MHA3004 Machine Vision and Image Processing
- MHA3005 Augmented Reality and Haptics
- MHA3006 Virtual Instrumentation
- MHA3007 Machine Fault Diagnostics and Signal Processing
- CSE3081 Cyber security for automation systems
- CSE3082 Industrial Networking and Information Systems
- MHA3008 Digital Manufacturing systems
- MHA3009 Internet of Things and Cloud based Manufacturing
- MHA3010 Machine Learning for Automation
- CSE3083 Engineering Data Analytics
- MHA3011 Intelligent Systems and Control
- MHA3012 Modern Control Theory
- MHA4001 Adaptive and Predictive control of Mechatronics Systems
- MHA4002 Advanced Robotic Systems
- MHA3013 Autonomous Mobile Robots
- MHA3014 Vehicle Dynamics and Aerodynamics
- MHA3015 Autotronics and Vehicle Automation
- MHA4008 Vehicle Ergonomics and Human Comfort
- MHA4003 Driving Assistance Systems and Autonomous Vehicles
- MHA4004 Electric and Hybrid Vehicles
- ECE3049 Embedded Systems for Mechatronics
- ECE3050 Advanced Electronics Systems
- MHA4005 Bionics and Medical Mechatronics
- MHA4006 Micro and Nano Mechatronics Systems
- MHA4007 Agriculture Automation and Smart Farming
- MHA3016 System Reliability, Security and Safety

*Decision: Agenda Item 61.11.1.A. Approved.*

Item 61.11.2.A. To consider and approve the syllabus for the following 12 courses offered in M.E. (Part time) Automotive Mechatronics.

[Curriculum was approved in the 59<sup>th</sup> Meeting of the Academic Council held on 24.09.2020]

### **Programme Core – 1 Course**

- MAM5001 Automotive Noise, Vibration and Harshness

### **Programme Elective - 11 Courses**

- MAM6001 Data Analytics for Engineers
- MAM5002 Electric and Hybrid Vehicle Systems
- MAM5003 Driving assistance systems

- MAM5004 Machine Vision and augmented reality
- MAM6002 Power train systems
- MAM6003 Autonomous vehicles
- MAM6004 Ergonomics and human comfort for Automotive Applications
- MAM5005 Power electronics and Drives
- MAM5006 System and circuits Architecture
- MAM6005 Electromagnetic Compatibility
- MAM6006 Electronic Reliability

*Decision:* *Agenda Item 61.11.2.A. Approved.*

**Item 61.12.** **Dr. A. Selvakumar, HoD, VFIT, (Chennai Campus), moved the following.**

Item 61.12.1.A. To consider and approve the introduction of 2 new University Core Courses with Syllabi for the following courses offered in B.Tech. Fashion Technology. [Curriculum was approved in the 41<sup>st</sup> Meeting of the Academic Council held on 17.06.2016].

**University Core – 2 Courses**

- ECE2037 Wearable Electronics
- MAT2009 Statistics for Fashion Technology

*Decision:* *Agenda Item 61.12.1.A. Approved.*

**Item 61.13.** **Dr. S.K. Sudarsanam, Dean, VITBS, (Chennai Campus), moved the following.**

Item 61.13.1.A. To consider and approve the syllabus for the following 10 courses offered in B.B.A. Honours.

[Curriculum approved in the 58<sup>th</sup> Meeting of the Academic Council held on 26.02.2020].

**University Core – 6 Courses**

- BMT3094 Summer Internship
- BMT3095 Summer Capstone Project
- BMT1039 Business Ethics and Corporate Social Responsibility
- BMT1040 Workshop on Design Thinking
- BMT1041 Workshop on Case development
- BMT1042 Workshop on Phenomenology

**Programme Core - 4 Courses**

- BMT2022 Introduction to Statistics II
- BMT2023 Real World Business Solutions
- BMT2024 Negotiations and Decision Making
- BMT2025 Computer Based Analysis

*Decision:* *Agenda Item 61.13.1.A. Approved.*

Item 61.13.1.B. To consider and approve the change in credit structure

Course code	Course Title	Existing					Proposed				
		L	T	P	J	C	L	T	P	J	C
BMT2001	Macroeconomics	2	0	0	0	2	2	1	0	0	3

*Decision: Agenda Item 61.13.1.B. Approved.*

**Item 61.14. Dr. A. Siva Subramanian, Dean, SENSE, (Chennai Campus), moved the following.**

Item 61.14.1.A. To consider and ratify the NASSCOM courses to be offered under programme electives for various programmes (as per the list given)

**NASSCOM - Program Elective Courses**

- CSE3501 Information Security Analysis and Audit
- CSE3502 Information Security Management
- CSE3505 Foundations of Data Analytics
- CSE3506 Essentials of Data Analytics
- ECE3501 IoT Fundamentals
- ECE3502 IoT Domain Analyst

The above courses are considered as programme electives for the following eight programmes:

- B.Tech. Computer Science and Engineering
- B.Tech. Computer Science and Engineering with Specialization in Artificial Intelligence and Machine Learning
- B.Tech. Computer Science and Engineering with Specialization in Cyber Physical Systems
- B.Tech. Computer Science and Engineering with Specialization in Artificial Intelligence and Robotics
- B.Tech. Electronics and Communication Engineering
- B.Tech. Electronics and Computer Engineering
- M.Tech. (Integrated) - Software Engineering
- M.Tech. (Integrated) Computer Science and Engineering with Specialization in Business Analytics

*Decision: Agenda Item 61.14.1.A. Approved.*

Item 61.14.2.A. To consider and ratify the following NASSCOM courses to be considered as programme elective for B. Tech. Electronics and Computer Engineering

- ECE3501 IoT\_Fundamentals
- ECE3502 IoT Domain Analyst

*Decision: Agenda Item 61.14.2.A. Approved.*

Item 61.14.3.A. To consider and ratify change in component credit.

- ECM2002 Machine Learning Algorithms (J component removed and Practical added) Credit to be changed from 3 0 0 4 4 to 3 0 2 0 4

*Decision: Agenda Item 61.14.3.A. Approved.*

**Item 61.15. Comments / suggestions by the members.**

- To facilitate individualised learning.
- To strengthen the evaluation process and to introduce innovative methods of evaluation.
- Additional credentials such as minor and honours should help in placement of the students.
- VITOL can offer elective courses and to again visibility courses should be offered for students from other institutions.
- Strategies to be framed to have virtual industrial internships.
- Students should be able to showcase the knowledge that they have picked up and there should be improvement in such demonstration ability.

**Item 61.16. Vote of thanks pronounced by the Registrar.**

*R. Kodali*

**Vice Chancellor**

*(Chairperson of the Academic Council)*

**Prof. Rambabu Kodali**

**Vice Chancellor**

**Vellore Institute of Technology (VIT)**

**Vellore – 632 014, Tamil Nadu, India**