B.S. Abdur Rahman ™
Crescent
Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

ANNEXURE 1.1.2

Excerpts of Minutes of 18th Academic Council Meeting

B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

Minutes of the

Eighteenth meeting of the Academic Council of B.S. Abdur Rahman Crescent Institute of Science and Technology

held on

February 24, 2022

Online Meeting

	Projects		
CEDX 16	Advanced Concrete Technology	3	25 %
CEDX 41	Air and Noise Pollution Control	3	20 %
CEDX 42	Solid Waste Management	3	20 %

The Curriculum and syllabi of the courses (III & IV Semester) of B.Tech., Civil Engineering under R 2021 are given in **Annexure 18.6.1.** The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Resolution:

After deliberations, the agenda item was approved.

Item 18.6.2

To consider and approve the revision in the curriculum and syllabi of B.Tech Civil Engineering under Regulations 2017.

Note on Agenda:

Based on the feedback from faculty members and students, the course 'CEC 4107 - Water Resources Engineering' is introduced as a core course in the VII Semester of B.Tech. Civil Engineering under Regulations 2017.

This was discussed in the 16th meeting of Board of Studies of the Department of Civil Engineering and the board has recommended the same for approval. The revised curriculum and syllabus of the course 'CEC 4107 - Water Resources Engineering' of B.Tech Civil Engineering under Regulations 2017 are given in **Annexure 18.6.2.**

The Academic Council may consider and approve the same.

Resolution:

After deliberations, the agenda item was approved.

SCHOOL OF MECHANICAL SCIENCES

DEPARTMENT OF MECHANICAL ENGINEERING

Item 18.7

To consider and approve the recommendations of the Board of Studies of the Department of Mechanical Engineering

Item 18.7.1

To consider and approve the syllabi of (III & IV semester core courses and the elective courses) of B.Tech. Mechanical Engineering under Regulations 2021.

Note on Agenda:

The major revision in the curriculum of B.Tech. Mechanical Engineering under R 2021 & Syllabi of I & II Semester courses were approved in the 17th meeting of the Academic Council and accordingly implemented from the year AY 2021-2022.

In the 19th meeting of the Board of Studies of Mechanical Engineering Department which was held on 21.12.2021, the syllabi of III & IV Semester Core Courses and the elective courses were deliberated. After deliberations, the board has recommended the same for approval in the Academic Council.

The salient features of the B.Tech. Mechanical Engineering curriculum under R 2021 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. Semester I & II (AY 2021-22)

a) New Course introduced:

Course Code	Course Title	Credits
MED 1211	Engineering Materials	3

b) `Courses with Syllabus revision:

Course Code	Course Title	Credits	Revision (%)
GED 1101	Engineering Graphics	3	25%
GED 1102	Engineering Design	2	25%
GED 1103	Manufacturing Practices Laboratory	1	20%
GED 1201	Engineering Mechanics	4	20%
MED 1212	Design Appreciation Laboratory	1	20%

II. Semester III and IV (AY 2022-23)

a) New Courses Proposed:

Course Code	Course Title	Credits
MED 2105	Machine Drawing Laboratory	1
MED 2214	Materials Engineering and Technology	3
MED 2215	Machine Tools and Metrology	4
MEDX61	Advanced Welding Processes	3
MEDX62	Advanced Casting and Forming Process	3
MEDX 81	Powder Metallurgy	3

MEDX 89	Materials for Energy Technologies	2
MEDX 92	Physical Metallurgy	1

b) Courses with syllabus revision (Proposed):

Course Code	Course Name	Credits	Revision (%)
MED 2101	Solid Mechanics	3	20%
MED 2102	Engineering Thermodynamics	3	20%
MED 2103	Theory of Machines	4	35%
MED 2104	Basic Manufacturing Processes	3	20%
MED 2106	Mechanics Laboratory	1	20%
MED 2211	Thermal Engineering	4	20%
MED 2212	Fluid Mechanics and Machinery	4	20%
MED2213	Design of Machine Elements	4	20%
MEDX 02	Design of Hydraulics and Pneumatics	3	20%
MEDX03	Noise, Vibration and Harshness	3	20%
MEDX 33	Nuclear Engineering	3	20%
MEDX 43	Combustion of Fuels	2	20%
MEDX 44	Alternate Fuels	1	20%

The curriculum and syllabi of III & IV semester core and elective courses of B.Tech. Mechanical Engineering under R 2021 are given in **Annexure 18.7.1.** The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 18.7.2

To consider and approve the syllabi of Ph.D. courses offered to Ph.D. Scholars of Mechanical Engineering Department.

Note on Agenda:

In the 19th meeting of the Board of Studies of Mechanical Engineering Department, which was held on 21.12.2021, the syllabi of the following courses offered to Ph.D. scholars were deliberated. After deliberations, the board has recommended the same for approval in the Academic Council.

Course Code	Course Name	Credit
MEZ 931	Formulation and Characterization of Friction	3

SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Item 18.11

To consider and approve the recommendations of the Board of Studies of the Department of Electrical and Electronics Engineering.

Item 18.11.1

To consider and approve the syllabi (III & IV semester) of B.Tech. EEE under Regulations 2021.

Note on Agenda:

The major revision in curriculum of B. Tech EEE under R 2021 & Syllabi of I & II Semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the year AY 2021-2022.

In the 16th meeting of Board of Studies of EEE Department, which was held on 13th December 2021 the syllabi of III and IV semester courses including the professional elective courses were deliberated. After deliberations the board has recommended the same for approval in the Academic Council.

The salient features of the B. Tech. EEE curriculum under R 2021 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. Semester I & II (AY 2021-22)

a) New Courses introduced:

Course Code	Course Title	Credits
GED 1202	Basic Electrical and Electronics Engineering	4
GED 1204	Basic Electrical and Instrumentation Engineering	4
GED 1203	Basic Electrical Engineering	4
EED 1202	Signals and Systems	3
EED 1201	Electric and Magnetic Circuits	3

b) Courses with Syllabus revision:

Course Code	Course Name	Credits	Revision (%)
GED 1103	Manufacturing Practices Laboratory	1	20%
EED 1203	Electric Circuits Laboratory	1	60%

II. Semester III and IV (AY 2022-23)

a) New Courses Proposed:

Course Code	Course Title	Credits
EED 2104	Transmission and Distribution	3
EED 2205	Python for Electrical Engineers	3
EEDX62	Solar Energy Technology	3

b) Courses with syllabus revision (Proposed):

Course Code	Course Name	Credits	Revision (%)
EED 2101	Electronic Devices	3	25%
EED 2102	Electro Magnetic Theory	3	25%
EED 2103	Electromechanical Energy Conversion	3	50%
EED 2105	Electronic Devices Laboratory	1	30%
EED 2106	Electromechanical Energy Conversion Laboratory	1	20%
EED 2201	AC Machines	3	25%
EED 2202	Digital Electronics	3	25%
EED 2203	Electrical Measurement and Instrumentation	3	40%
EED 2204	Power System Protection	3	25%
EED 2206	AC Machines Laboratory	1	20%
EED 2207	Digital Electronics Laboratory	1	20%
EEDX02	Electric Energy Generation, Utilization and Conservation	3	20%
EEDX 12	Network Analysis and Synthesis	3	20%

The curriculum and syllabi of the courses (III & IV semester) of B. Tech. EEE under R 2021 are given in **Annexure 18.11.1.** The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 18.11.2

To consider and ratify the revision in the curriculum & syllabi of M.Tech Power Systems Engineering under R 2019.

Note on Agenda:

The course EEDY 040 - 'Electric Vehicle and Power Management' was included as an elective course in the curriculum of M.Tech. (Power Systems Engineering) under Regulations 2019. This revision was deliberated in the 16th Meeting of Board of Studies of the Department of Electrical and Electronics Engineering and the board has recommended the same for ratification with effect from AY 2021-22.

The ratified curriculum of M.Tech PSE under R 2019 & syllabus of the course EEDY 040 -'Electric Vehicle and Power Management' are given in **Annexure 18.11.2.**

The Academic Council may consider and ratify the same for implementation from academic year 2021-22.

Resolution:

The agenda item was ratified with effect from the academic year 2021-22.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Item 18.12

To consider and approve the recommendations of the Board of Studies of the Department of Electronics and Communication Engineering.

Item 18.12.1

To consider and approve the syllabi of III & IV semester (Core and Professional elective courses) of B.Tech. ECE under Regulations 2021.

Note on Agenda:

The major revision in curriculum of B.Tech. ECE programme under R 2021 & Syllabi of I & II semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the year AY 2021-2022.

In the 22nd meeting of Board of Studies of B.Tech. ECE Department which was held on 14-12-2021, the syllabi of III & IV Semester Courses including professional elective courses of B.Tech. ECE programme under R 2021 were deliberated. After deliberations, the board has recommended the same for approval in the Academic Council.

The salient features of the B.Tech. ECE curriculum under R 2021 with respect to

BTDX72	Transport phenomena in Bioprocess	3	20%

The curriculum and syllabi of the courses (III to VIII Semester) of B.Tech. Biotechnology under R 2021 are given in **Annexure 18.18.1**

The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item No.18.18.2

To consider and approve the syllabi (III to VI semester) of B.Sc. Biotechnology under Regulations 2021.

Note on Agenda:

The major revision in curriculum of B.Sc. Biotechnology under R 2021 & Syllabi of I & II Semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the AY 2021-2022.

In the 8th meeting of Board of Studies of School of Life Sciences, which was held on 05 July 2021, the syllabi of III to VI Semester Courses were deliberated. After deliberations the board has recommended the same for approval in the Academic Council.

The salient features of the B.Sc. Biotechnology curriculum under R 2021 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. Semester I & II (AY 2021-22)

a) New Courses introduced:

Course Code	Course Name	Credits
LSD 1201	Biomolecules	4
LSD 1202	Biomolecules Laboratory	2
LSD 1204	Basics of Genetics Laboratory	2
LSDX 003	Environmental Biotechnology	4
LSDX 004	Environmental Biotechnology Laboratory	2
LSDX 005	Pharmacology	4
LSDX 006	Pharmacology Laboratory	2
LSDX 007	Biopharmaceutics and Pharmacokinetics	4
LSDX 008	Biopharmaceutics and Pharmacokinetics Laboratory	2

LSDX 009	Waste Management	4
LSDX 010	Waste Management Laboratory	2
LSDX 012	Herbal Technology Laboratory	2

b) Courses with syllabus revision:

Course Code	Course Name	Credits	Revision (%)
LSD 1101	Cell Biology	4	20%
LSD 1102	Cell Biology Laboratory	2	20%
LSD 1103	Microbiology	4	20%
LSD 1104	Microbiology Laboratory	2	20%
LSD 1203	Basics of Genetics	4	20%

II. Semester III and IV (AY 2022-23)

a) New Courses Proposed:

Course Code	Course Name	Credits
LSD 2106	Enzymology Laboratory	2
LSD 2104	Molecular Biology Laboratory	2
LSD 2204	Medical Biotechnology Laboratory	2
LSDX 014	Biostatistics and experimental designing Laboratory	2
LSDX 016	Bioinstrumentation Laboratory	2
LSDX 017	Phytochemistry	4
LSDX 018	Phytochemistry Laboratory	2
LSDX 019	Artificial Intelligence in Medicine	4
LSDX 020	Artificial Intelligence Laboratory	2
LSDX 021	Intellectual Property Rights	4
LSDX 022	Patent drafting and application Laboratory	2
LSDX 023	Bioentrepreneurship	4
LSDX 024	Bioentrepreneurship Laboratory	2

b) Courses with syllabus revision (Proposed):

Course Code	Course Name	Credits	Revision (%)
LSD 2101	Biochemistry	4	20%
LSD 2102	Biochemistry Laboratory	2	20%
LSD 2103	Molecular Biology	4	20%

LSD 2105	Enzymology	4	20%
LSD 2201	Bioprocess Technology	4	20%
LSD 2202	Bioprocess Technology Laboratory	2	20%
LSD 2203	Medical Biotechnology	4	20%
LSD 2205	Bioinformatics	4	20%
LSD 2206	Bioinformatics Laboratory	2	20%

III. Semester V & VI (AY 2023-24)

a) New Courses Proposed:

Course Code	Course Name	Credits
LSDX 052	Disease Management Laboratory	2
LSDX 054	Cytogenetics Laboratory	2
LSDX 056	Agricultural Biotechnology Laboratory	2
LSDX 058	Nanobiotechnology Laboratory	2
LSDX 059	Regenerative Medicine	4
LSDX 060	Regenerative Medicine Laboratory	2
LSDX 062	Cancer Biology Laboratory	2
LSDX 063	Developmental Biology	4
LSDX 064	Developmental Biology Laboratory	2
LSDX 066	Food Biotechnology Laboratory	2
LSDX 068	Biofertilizer Technology Laboratory	2
LSDX 069	Computer aided Drug Design	4
LSDX 070	Computer aided Drug Design Laboratory	2
LSDX 071	Biomass and Bioenergy	4
LSDX 072	Biomass and Bioenergy Laboratory	2
LSDX 074	rDNA Technology Laboratory	2
LSDX 076	Industrial Biotechnology Laboratory	2
LSDX 077	Molecular Farming	4
LSDX 078	Molecular Farming Laboratory	2
LSDX 080	Biophysics Laboratory	2
LSDX 081	Molecular Diagnostics	4
LSDX 082	Molecular Diagnostics Laboratory	2
LSDX 083	Downstream Process	4

LSDX 084	Downstream Process Laboratory	2

b) Courses with syllabus revision (Proposed):

Course Code	Course Name	Credits	Revision (%)
LSD 3101	Plant Biotechnology	4	20%
LSD 3102	Plant Biotechnology Laboratory	2	20%
LSD 3103	Animal Biotechnology	4	20%
LSD 3104	Animal Biotechnology Laboratory	2	20%
LSD 3201	Immunotechnology	4	20%
LSD 3202	Immunotechnology Laboratory	2	20%
LSD 3203	Genomics and Proteomics	4	20%
LSD 3203	Genomics and Proteomics Laboratory	2	20%

The curriculum and syllabi of the courses (III to VI Semester) of B.Sc. Biotechnology under R 2021 are given in **Annexure 18.18.2.**

The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item No. 18.18.3

To consider and approve the syllabi (III & IV semester) of M.Tech. Food Biotechnology under Regulations 2019.

Note on Agenda:

The major revision in curriculum of M.Tech. Food Biotechnology under R 2019 & Syllabi of I & II Semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the AY 2021-2022.

In the 8th meeting of Board of Studies of School of Life Sciences, which was held on 05 July 2021, the syllabi of III & IV Semester Courses were deliberated. After deliberations, the board has recommended the same for approval in the Academic Council.

The salient features of the M.Tech. Food Biotechnology curriculum under R 2019 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. Semester I & II (AY 2021-22)

LTD 7112	Project Work (Phase I)	6
LTD 7121	Project Work (Phase II)	18
LTDY 086	Dairy Technology	3
LTDY 087	Food Nutrigenomics	3
LTDY 088	Food Product Design and Development	3
LTDY 089	Food Regulatory Affairs and Food Certification	3
LTDY 090	Global Food Marketing Development & Aid Policy	3
LTDY 091	Food Safety Assessment	3

The curriculum and syllabi of the courses (III to IV Semester) of M.Tech. Food Biotechnology under R 2019 are given in **Annexure 18.18.3**.

The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

CRESCENT SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT STUDIES

Item No. 18.19

To consider and approve the recommendations of the board of studies of the Crescent School of Business

Item No. 18.19.1

To consider and approve the syllabi of (III & IV semester) of MBA under Regulations 2021

Note on Agenda:

The major revision in the curriculum of MBA under R 2021 & syllabi of I & II semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the AY 2021-2022.

In the 12th meeting of Board of Studies of Crescent School of Business, which was held on 28th January 2022, the syllabi of III & IV semester courses were deliberated. After deliberations, the board has recommended the same for approval in the Academic Council.

The salient features of the MBA curriculum under R 2021 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. Semester I & II (AY 2021-22)

a) New Courses introduced:

Course Code	Course Name	Credit
MSE 6103	Statistics for Decision Making	4
MSE 6108	Computer Applications in Business Lab	1
MSE 6109	Business Communication Lab	1
MSE 6203	Corporate Finance	4
MSE 6204	Operations Management	4

b) Courses with Syllabus revision:

Course Code	Course Name	Credits	Revision (%)
MSE 6104	Accounting for Managers	4	80%
MSE 6204	Operations Management	4	80%

II. Semester III & IV (AY 2022-23)

a) New Courses (Proposed):

Course Code	Course Name	Credit
MSE 7101	Managing Disruptive Technologies	4
MSEY 016	Behavioural and Personal Finance	4
MSEY 018	Financial Management	4
MSEY 064	Materials Management	4
MSEY 069	Applied Operations Research	4
MSEY 086	Managing Family Business	4
MSEY 131	Fundamentals of Banking	4
MSEY 132	Legal Aspects of Banking	4
MSEY 133	Risk Management in Banks	4
MSEY 134	Retail Banking	4
MSEY 135	Treasury and Derivative Management	4
MSEY 136	International Banking and Forex Management	4
GEEY 127	Food and Agri Tech Business	4
GEEY 130	NGO Management	4

b) Courses with Syllabus revision (Proposed):

Course Code	Course Name	Credits	Revision (%)
MSEY 019	Financial Markets and Services	4	90%
MSEY 020	Financial Technology	4	70%
MSEY 036	Strategic Human Resource Management	4	60%
MSEY 061	Supply Chain Management	4	80%
MSEY 121	R Programming for Business Research Analytics	4	60%
MSEY 122	Python Programming	4	50%
MSEY 123	Data Visualization	4	90%
MSEY 141	Design Thinking and Innovation	2	90%
MSEY 142	Strategic Leadership and Governance	2	90%
MSEY 143	Sustainability Management	2	90%
MSEY 144	Balanced Score Card	2	90%
GEEY 128	Research Methodology and Data Analysis	4	70%
GEEY 129	Business Analytics	4	40%
GEEY 131	Management of Rural Business	4	60%

The curriculum and syllabi of the courses (III & IV Semester) of MBA under R 2021 are given in **Annexure 18.19.1**

The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item No. 18.19.2

To consider and approve the syllabi (II semester) of MBA IEV under Regulations 2021

Note on Agenda:

The new curriculum of MBA IEV under R 2021 and syllabi of I semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the AY 2021-2022.

The Academic Council may consider and approve the same for implementation from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Vote of thanks by Dean (Academic Affairs)

The Dean AA thanked all the members of the Academic Council, in particular, the expert members from Academia and industry for their valuable time, active participation and excellent suggestions for the holistic development of the institution.

REGISTRAR

REGISTRAR
B.S. Abdur Rahman
Crescent
Institute of Science & Technology
Vandalur, Chennai-600 048

VICE CHANCELLOR

Excerpts of Minutes of 19th Academic Council Meeting

B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

Minutes of the

Nineteenth Meeting of the Academic Council
of
B.S. Abdur Rahman Crescent Institute of Science and Technology

held on

September 29, 2022

ITEMS MOVED BY CHAIRMAN, BOARD OF STUDIES

SCHOOL OF INFRASTRUCTURE

DEPARTMENT OF CIVIL ENGINEERING

Item 19.3

To consider and approve the recommendations of the Board of Studies of the Department of Civil Engineering.

Item 19.3.1

To consider and approve the Curriculum and Syllabi of M.Tech. Structural Engineering under Regulations 2022.

Note to Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 17th meeting of Board of Studies of Civil Engineering Department, which was held on 10th August 2022, the curriculum and syllabi and Programme Specific Outcomes of M.Tech. Structural Engineering under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Tech. Structural Engineering curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I - IV

a) New courses introduced: (Academic Year 2022-23)

Course Code	Course Name	Credit
CEE6104	Destructive and Non-Destructive Testing of Concrete	1
CEE6214	Structural Modeling and Analysis Laboratory	1
CEEY106	Ground Improvement Techniques	3
CEEY111	Subsurface Exploration Techniques	2
CEEY112	3D Printing Concrete Technology	1
CEEY202	Characterization of Construction Material	3

b) Courses with Syllabus revisions:(Academic Year 2022-23)

Course Code	Course Name	Credit	Revision (%)
CEE6101	Advanced Design of Concrete Structures	4	20
CEE6103	Condition Assessment and Rehabilitation of Structures	3	25
CEE6102	Dynamics of Structures	4	20
CEE6211	Finite Element Analysis in Structural Engineering	3	20
CEE6213	Advanced Design of Steel Structures	4	20
CEEY201	Advanced Concrete Technology	3	30
CEEY202	Corrosion prevention and control in RC Structures	3	20
CEEY109	Water Proofing of Concrete and Masonry Structures	3	60
CEEY211	Fire protection of Structures	1	50

The Curriculum, Syllabi of the courses and Programme Specific Outcomes of M.Tech. Structural Engineering under R 2022 are given in Annexure 19.3.1.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the above item was approved.

Item 19.3.2

To consider and approve the curriculum and syllabi of M.Tech. Construction Engineering and Project Management under Regulations 2022.

Note to Agenda:

In the 17th meeting of Board of Studies of Civil Engineering Department, which was held on 10th August 2022, the curriculum and syllabi and Programme Specific Outcomes of Construction Engineering and Project Management under R 2022 were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Tech. Construction Engineering and Project Management curriculum under R 2022 with respect to “Introduction of New courses” and “Courses with

syllabus revisions'" are as follows:

I. Semester I - IV

a) New courses introduced:(Academic Year 2022-23)

Course Code	Course Name	Credit
CEE 6125	Statistics Laboratory	1
CEE6104	Destructive and Non-Destructive Testing of Concrete	3
CEEY 152	Port Planning and Management	3
CEEY 162	Planning Legislation and Administration	3
CEEY154	Building Acoustics	2
CEEY 165	Sustainable Construction	3
CEEY 156	Digital Technology in Construction	1

b) Courses with Syllabus revisions:(Academic Year 2022-23)

Course Code	Course Title	Credits	Revision (%)
CEE 6124	Construction Equipment Management	2	30
CEE 6222	Lean Construction Management	3	40
CEEY 151	Infrastructure Planning and Management	3	20
CEEY 153	Integrated Building Management Services	3	35
CEEY 167	Resource Management and Control in Construction	3	35
CEEY101	Advanced Concrete Technology	3	30

The Curriculum and syllabi of the courses and Programme Specific Outcomes of M.Tech. Construction Engineering and Project Management under Regulations 2022 are given in Annexure 19.3.2.

The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Resolution:

After deliberations, the agenda item was approved.

Item 19.3.3

To consider and approve the revision in curriculum & syllabi of the course 'CECX 64 Sustainable Design of Buildings' in B.Tech. Civil Engineering under Regulations 2017.

Note to Agenda:

The course "CECX 64 Sustainable Design of Buildings" was introduced as professional elective course in the VII semester. This revision was deliberated in the 17th meeting of board of studies of Department of Civil Engineering and the board has recommended the same for approval in the Academic Council.

The revised curriculum & syllabus of the course "CECX 64 Sustainable Design of Buildings" is given in Annexure 19.3.3.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Discussions:

Dr. B. Suresh suggested rephrasing the name of the course "CECX 64 Sustainable Design of Buildings" to "CECX 64 Design of Sustainable Buildings" for more clarity.

Resolution:

After deliberations, the agenda item was approved.

SCHOOL OF MECHANICAL SCIENCES

DEPARTMENT OF MECHANICAL ENGINEERING

Item 19.4

To consider and approve the recommendations of the Board of Studies of the Department of Mechanical Engineering.

Item 19.4.1

To consider and approve the curriculum and syllabi of Program core courses and Professional elective courses (Semester I) of M.Tech. CAD-CAM under Regulations 2022

Note to Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment

opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 20th meeting of Board of Studies of Mechanical Engineering Department, which was held on 08th August 2022, the curriculum and syllabi of Program core courses and Professional elective courses (Semester I) of M.Tech. (CAD-CAM) under R 2022 were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Tech. (CAD-CAM) curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) New courses introduced: (Academic Year 2022-23)

Course Code	Course Title	Credits
MEEY 013	Artificial Intelligence and Machine Learning	3

b) Courses with Syllabus revisions:(Academic Year 2022-23)

Course Code	Course Title	Credits	Revision (%)
MEE 6101	Applied Materials Engineering	3	20
MEE 6102	Computer Graphics and Geometric Modeling (Integrated lab)	4	25
MEE 6103	Mechatronics and Automation (Integrated lab)	4	25
MEE 6104	Additive Manufacturing	2	20
MEE 6201	Integrated Product Development (Integrated Lab)	3	30
MEE 6202	Advanced Finite Element Analysis (Integrated Lab)	4	25
MEE 6203	Digital Manufacturing	2	20
MEE 6204	Advanced Computing Lab	1	20
Professional elective courses identified for Semester I			
MEEY 006	Design of Hydraulic and Pneumatic systems	3	20
MEEY 009	Mechanical Vibrations	3	20

MEEY 011	Tribology	3	20
MEEY 012	Measurements and NDT (Integrated Lab)	3	25
MEEY 021	Advances in Manufacturing Technology	3	20
MEEY 022	CNC Machines and Computer Aided Manufacturing	3	20
MEEY 032	Industrial Safety Management	3	20
MEEY 034	Manufacturing Information Systems	3	20

The Curriculum and syllabi of Program core courses and Professional elective courses (Semester I) of M.Tech. CAD-CAM under R 2022 are given in Annexure 19.4.1.

The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Resolution:

After deliberations, the agenda item was approved.

Item 19.4.2

To consider and approve the syllabi of Program core courses and Professional elective courses (Semester V - VIII) of B.Tech. Mechanical engineering under Regulations 2021.

Note to Agenda:

The major revisions in curriculum of B.Tech. Mechanical Engineering under Regulations 2021 and syllabi of program core courses (I – IV sem.)was approved in the 17th& 18th meeting of Academic Council respectively. In the 20th meeting of Board of Studies of Mechanical Engineering Department, which was held on 08th August 2022, the syllabi of Program core courses and Professional elective courses (Semester V - VIII) were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The salient features of B.Tech. Mechanical Engineering curriculum under R-2021 with respect to “Introduction of New courses” and “Courses with Syllabus revisions’” are as follows:

I. Semester V - VIII

a) New courses proposed: (AY 2023-24)

Course Code	Course Title	Credits
MED 3103	Automation in Manufacturing	3
MED 3212	Additive Manufacturing	3
MEDX 07	Design of Transmission Systems	3
MEDX 08	Mechanics of Composite Materials	3
MEDX 09	Design of Material Handling Equipment	3
MEDX 10	Tribology	3
MEDX 11	Design of Electric Vehicle Components	3
MEDX 12	Shipment Packaging Design and Development	3
MEDX 13	Design of Pressure Vessels and Piping Engineering	3
MEDX 17	Instrumentation and Control	2
MEDX 19	Product Design Using Value Engineering	1
MEDX 39	Design of Heat Transfer Equipments	3
MEDX 40	Electric and Hybrid Vehicles	3
MEDX 45	Design of Compact and Micro Heat Exchangers	1
MEDX 54	Project Management	3
MEDX 55	Advanced Machining Processes	3
MEDX 56	Surface Mounting Technology	3
MEDX 57	Operation Research Techniques	3
MEDX 58	Total Productive Maintenance	3
MEDX 59	Agile Manufacturing	3
MEDX 63	Industrial Engineering	3
MEDX 64	Green Manufacturing Design and Practices	3
MEDX 65	Rubber Product Manufacturing Technology	3
MEDX 66	Tyre Manufacture and Testing	3
MEDX 76	Aerospace Materials	3
MEDX 77	Thin Films, Coatings and Applications	3
MEDX 79	Fracture of Engineering Materials	3
MEDX 80	Design and Applications of Biomaterials	3
MEDX 82	Friction Materials: Formulation and Characterization	3
MEDX 83	Rubber Recycling and Waste Management	3
MEDX 84	Polymer Rheology	3
MEDX 85	Rubber Technology	3

MEDX 86	Characterization of Materials	3
MEDX 88	Materials for Modern Device Technology	2
MEDX 90	Materials for Extreme Environment	2
MEDX 91	Dynamic Behaviour of Materials	2
MEDX 93	Corrosion Engineering	1

New courses proposed: (AY 2024-25)

Course Code	Course Title	Credits
MED 4101	Automobile Engineering	3

b) Courses with syllabus revisions (proposed): (AY 2024-25)

Course Code	Course Title	Credits	Revision (%)
MED 3101	Heat and Mass Transfer	4	25
MED 3102	Mechatronics	4	25
MED 3104	Product Modelling Laboratory	1	20
MED 3211	Finite Element Analysis	4	30
MED 3213	Simulation Laboratory	1	20
MEDX 01	Advanced Strength of Materials	3	25
MEDX 04	Design of Jigs, Fixtures and Press Tools	3	25
MEDX 05	Industrial Problem Solving Techniques	3	20
MEDX 06	Product Design and Manufacturing	3	20
MEDX 14	Geometric Modelling	2	25
MEDX 15	Reliability Engineering	2	25
MEDX 16	Micro Electro Mechanical Systems (MEMS)	2	20
MEDX 18	Advanced System Simulation (1D Modeling)	1	25
MEDX 31	Refrigeration and Air Conditioning	3	20
MEDX 32	Advanced I.C. Engines	3	20
MEDX 34	Gas Dynamics and Jet Propulsion	3	20
MEDX 35	Energy Conversion Systems	3	25
MEDX 36	Computational Flow and Heat Transfer	3	25
MEDX 37	Renewable Sources of Energy	3	20

MEDX 38	Solar Engineering	3	20
MEDX 41	Energy Conservation and Management	2	25
MEDX 42	Automotive Pollution and Control	2	20
MEDX 51	Process Planning and Cost Estimation	3	20
MEDX 52	Production Planning and Control	3	20
MEDX 53	Statistics and Quality Control	3	20
MEDX 60	Composite Materials for Manufacture	3	20
MEDX 67	Plant Layout and Material Handling	2	20
MEDX 68	Production Management	2	20
MEDX 69	Internet of Things for Manufacturing	2	20
MEDX 70	Digital Manufacturing	1	25
MEDX 71	Geometric Dimensioning and Tolerancing	1	20
MEDX 72	Tool and Die Design	1	20
MEDX 78	Advanced Engineering Materials	3	20
MEDX 87	Science and Technology of Nano Materials	2	20

The syllabi of the program core courses and professional elective courses (semesters V - VIII) of B.Tech. Mechanical Engineering under R 2021 are given in Annexure 19.4.2.

The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Discussions:

Dr. B. Suresh suggested introducing course emphasizing on “Circular Economy” in the list of elective courses in the future revisions.

Resolution:

After deliberations, the agenda item was approved.

Item 19.4.3

To consider and approve the syllabi of Open elective courses for B.Tech. Programmes under Regulations 2021.

Note to Agenda:

In the 20th meeting of Board of Studies of Mechanical Engineering Department, which was held on 08th August 2022, the syllabi of open elective courses offered to B.Tech. Programmes were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The following are the details of open elective courses and its salient features:

I. Semester VI, VII & VIII

a) New courses proposed: (Academic Year 2023-24)

Course Code	Course Title	Credits
GEDX 120	Industry 4.0	3

Courses with syllabus revisions (proposed): (Academic Year 2023-24)

Course Code	Course Title	Credits	Revision (%)
GEDX 119	Industrial Safety	3	20
GEDX 128	Value Analysis and Engineering	3	20
GEDX 213	Industrial Robotics	3	20
GEDX 227	Total Quality Management	3	20

The syllabi of the open elective courses under R 2021 are given in Annexure 19.4.3.

The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Resolution:

After deliberations, the agenda item was approved.

DEPARTMENT OF AEROSPACE ENGINEERING

Item 19.5

To consider and approve the recommendations of the Board of Studies of the Department of Aerospace Engineering.

Item 19.5.1

To consider and approve the curriculum and syllabi of M.Tech. Avionics under Regulations 2022.

Note to Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and

employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 16th meeting of Board of Studies of Aerospace Engineering Department, which was held on 03.08.2022, the curriculum and syllabi (I & II semester) M.Tech. Avionics under R2022 were deliberated. After deliberations, the Board has recommended the same for approval in the academic council.

The salient features of the M.Tech. Avionics curriculum under R 2022 concerning 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. Semester I & II:

a) New Courses Introduced:(Academic Year 2022-23)

Course Code	Course Title	Credits
AEE6204	Programming in ADA Lab	1
AEE6205	UAV/MAV Design Lab	2
AEEY101	UAV System Design I	3
AEEY103	Payload and Sensors for UAV	3

b) Courses with Syllabus revision:(Academic Year 2022-23)

Course Code	Course Name	Credits	Revision (%)
AEE6102	Flight Instrumentation and Data Acquisition	3	23%
AEE6103	Mathematical Modelling and simulation lab	1	25%
AEE6202	Aircraft Navigation systems	3	25%
AEEY102	UAV system design II	3	30%
AEEY117	Flight Mechanics	3	22%
AEEY121	Satellite communications	3	20%

The Curriculum and syllabi of the courses (I & II Semester) of M.Tech. Avionics under R 2022 are given in Annexure 19.5.1.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-2023.

Resolution:

After deliberations, the agenda item was approved.

Item 19.5.2

To consider and approve the syllabi (V - VIII core courses and V semester elective courses) of B.Tech. Aeronautical Engineering under Regulations 2021

Note to Agenda:

The major revisions in curriculum of B.Tech. Aeronautical Engineering under Regulations 2021 and syllabi of I - IV Semester courses were approved in the 18th meeting of Academic Council. In the 16th meeting of Board of Studies of Aerospace Engineering Department, which was held on 03.08.2022, the syllabi of V - VIII semester core courses and V semester elective courses were deliberated. After deliberations, the board has recommended the same for approval in the Academic council.

The salient features of the B.Tech. Aeronautical Engineering curriculum under R 2021 with respect to 'Introduction of new courses' and 'Courses with syllabus revision' (V- VIII sem. & V sem. elective courses) are as follows:

I. Semester V – VIII

a) New Courses (proposed) : Academic Year 2023-24

Course Code	Course Title	Credits
AED 3104	Control Engineering (lab integrated)	3
AEDX 10	Micro Gas Turbine	1
AEDX 35	MEMS Devices and Fabrication	2

b) Courses with syllabus revision (proposed) : Academic Year 2023-24

Course Code	Course Name	Credits	Revision (%)
AED 3102	Aircraft Structural Design and Analysis	3	25%
AED 3212	Flight Dynamics	3	25%
AEDX 02	Helicopter Aerodynamics	3	30%
AEDX 09	Heat Transfer	3	20%
AEDX 17	Theory of Elasticity	3	22%

II. Semester VIII

Courses with Syllabus revision (proposed): Academic Year 2024-25

Course Code	Course Name	Credits	Revision (%)
AED 4103	Computational Mechanics Lab	1	30%

Discussions:

The expert members suggested to explore introducing courses emphasizing on Geographical Information System (GIS), Energy storage & hybrid energy, Cost Economics of Renewable energy and Modern Building and Electric systems considering the industry requirements in the upcoming revision of curriculum and syllabi.

Resolution:

After deliberations, the agenda item was approved.

Item 19.7.3

To consider and approve the revision of curriculum & syllabus of the course "Solar Energy Engineering and Technology' in B.Tech. Electrical and Electronics Engineering under Regulations 2017.

Note to Agenda:

The course "Solar Energy Engineering and Technology' was introduced as professional elective course in the VII semester. This revision was deliberated in the 17th meeting of board of studies of Department of Electrical and Electronics Engineering and the board has recommended the same for approval in the Academic Council.

The revised curriculum & syllabus of the course "Solar Energy Engineering and Technology' is given in Annexure 19.7.3.

The Academic Council may consider and approve the same.

Resolution:

After deliberations, the agenda item was approved.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Item 19.8

To consider and approve the recommendations of the Board of Studies of the Department of Electronics and Communication Engineering.

Item 19.8.1

To consider and approve the curriculum and syllabi of M.Tech. VLSI and Embedded Systems under Regulations 2022.

Note to Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 23rd meeting of Board of Studies of Electronics and Communication Engineering Department, which was held on 13th July 2022, the PEO and PSO, the curriculum and syllabi of M.Tech. VLSI and Embedded Systems under R2022 were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Tech. (VLSI & Embedded Systems) curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I - IV

a) New courses introduced: Academic Year 2022-23

i) Programme Core Courses

Course Code	Course Title	Credits
ECE 6123	Low Power IC Design	3

ii) Professional Elective Courses

Course Code	Course Title	Credits
ECEY 025	Industry 4.0	3
ECEY 027	Machine Learning for Embedded Systems	3
ECEY 054	Nano Electronics and Technology	3
ECEY 063	Electromagnetic Interference and Compatibility	3

b) Courses with Syllabus revisions: (AY 2022-23)

i) Programme Core Courses

Course Code	Course Title	Credits	Revision (%)
ECE 6124	Embedded Processor Architectures & Programming	3	20
ECE 6125	Digital VLSI Design Lab	1	40

ECE 6201	Research Methodology and IPR	3	20
ECE 6222	Analog Integrated Circuit Design	4	40
ECE 6223	Embedded Linux	2	40
ECE 6224	Embedded Systems Lab	1	25

ii) Professional Elective Courses

Course Code	Course Title	Credits	Revision (%)
ECEY 024	Internet Of Things	3	20
ECEY 026	Artificial Intelligence	3	20
ECEY 052	ASIC Design	3	40
ECEY 053	Advanced Digital System Design	3	50
ECEY 056	Programming System Verilog	2	60
ECEY 057	Scripting Languages For VLSI Design Automation	3	60
ECEY 059	Network on Chip	3	80
ECEY 060	SoC Design And Verification	3	60
ECEY 061	Testing Of VLSI Circuits	3	60
ECEY 062	VLSI Digital Signal Processing	3	70
ECEY 081	Multicore Architecture	3	70
ECEY 082	Embedded System For Robotics	3	70

The Curriculum and syllabi of M.Tech. (VLSI &Embedded System) under R 2022 are given in Annexure 19.8.1.

The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Resolution:

After deliberations, the agenda item was approved.

Item 19.8.2

To consider and ratify the revised PEOs & PSOs of B.Tech. Electronics and Communication Engineering under Regulations 2021.

Note to Agenda:

In the 23rd meeting of Board of Studies of Electronics and Communication Engineering Department, which was held on 13th July 2022, the revision in PEOs and PSOs

of B.Tech. Electronics and Communication Engineering under Regulations 2021 were deliberated. After deliberations, the Board has recommended the same for ratification in the Academic council. The revised PEOs and PSOs are given in Annexure 19.8.2

The Academic Council may consider and ratify the same with effect from the Academic Year 2021-22.

Resolution:

After deliberations, the agenda item was approved.

Item 19.8.3

To consider and approve the syllabi (V - VIII sem. core courses and professional elective courses) of B.Tech. Electronics and Communication Engineering under Regulations 2021.

Note to Agenda:

The major revisions in curriculum of B.Tech. Electronics and Communication Engineering under Regulations 2021 and syllabi of (I- IV Semester) courses were approved in the 17th& 18th meeting of Academic Council respectively.

In the 23rd meeting of Board of Studies of Electronics and Communication Engineering Department, which was held on 13th July 2022, the PEOs and PSOs of B.Tech. ECE R2021 and syllabi of (V - VIII sem. core courses and professional elective courses) were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The salient features of B.Tech. Electronics and Communication Engineering curriculum under R2021 with respect to "New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester V & VI

a) New courses (proposed): Academic Year 2023-24

i) Programme Core Courses

Course Code	Course Title	Credits
ECD3101	Python programming for Electronics Engineers*	2
ECD3202	High Frequency Communication Laboratory	1

ii) Professional Elective Courses

Course Code	Course Title	Credits
ECDX008	Multimedia Compression Techniques	3

ECDX014	Fundamentals of Automotive Electronics	3
ECDX019	Advanced Digital Signal Processing	3
ECDX023	Introduction to Embedded Linux	3
ECDX025	R Programming	3
ECDX027	Computer Vision	3
ECDX031	Programming for Robotics	3

II. Semester VII

a) Professional Elective Courses (proposed): Academic Year 2024-25

Course Code	Course Title	Credits
ECDX038	Cognitive Radio Network	3
ECDX040	5G Communication	3
ECDX043	Automotive Networking and protocols	3
ECDX044	Embedded Machine learning	3
ECDX045	CMOS Analog IC Design	3
ECDX047	Introduction to Cloud Computing and Edge Computing	3
ECDX050	Pattern Recognition	3
ECDX051	AI for IoT	3
ECDX053	Natural Language Processing	3
ECDX054	Autonomous Vehicle	3
ECDX055	Automotive Embedded Systems	3
ECDX056	Introduction to Robotic operating system	3
ECDX058	Industrial Robotics	3
ECDX059	AI for Robotics	3

b) i) Courses with syllabus revisions: Semester V & VI

Programme Core Courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
ECD 3102	Digital communication	4	40
ECD3104	Embedded systems design	3	20
ECD3106	Analog and Digital Communication Laboratory	1	20
ECD3107	Embedded Systems Design Laboratory	1	20
ECD 3201	Antennas and Wave propagation	3	20

ii) Courses with syllabus revisions: Semester VII

Programme Core Courses (proposed): Academic Year 2024-25

Course Code	Course Title	Credits	Revision (%)
ECD 4101	Wireless Communication	3	20

iii) Courses with syllabus revisions: Semester V & VI

Professional Elective Courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
ECDX010	Advanced Digital Logic System Design	3	20
ECDX012	Neural Networks and Fuzzy Logic	3	40
ECDX017	Introduction to PCB design	3	40
ECDX018	Radar and Navigational Aids	3	20
ECDX022	Introduction To Real Time Operating Systems	3	20
ECDX024	Mechatronics	3	40
ECDX026	Machine Learning	3	40

iv) Courses with syllabus revisions: Semester VII

Professional Elective Courses (proposed): Academic Year 2024-25

Course Code	Course Title	Credits	Revision (%)
ECDX034	MIMO Communication	3	40
ECDX041	Cyber Security	3	40
ECDX048	Nanoscale Devices and Circuit Design	3	40

The Curriculum and syllabi of the courses (V-VIII sem. core courses and professional elective courses) of B.Tech., Electronics and Communication Engineering under R 2021 are given in Annexure 19.8.3

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 19.10.5

To consider and ratify the revision in PEOs of B.Tech. (CSE), B.Tech. (Artificial Intelligence and Data Science), B.Tech CSE (IoT), B.Tech CSE (Cyber Security) under Regulations 2021

Note to Agenda:

The revised PEOs of programmes viz. B.Tech. (CSE), B.Tech. (Artificial Intelligence and Data Science), B.Tech CSE (IoT), B.Tech CSE (Cyber Security) under Regulations 2021 was deliberated in the 20th meeting of Board of Studies of Computer Science and Engineering Department, which was held on 16th August 2022. After deliberations, the Board has recommended the same for ratification in the Academic council.

The revised PEOs of programmes; B.Tech. (CSE), B.Tech. (Artificial Intelligence and Data Science), B.Tech CSE (IoT) and B.Tech CSE (Cyber Security) under Regulations 2021 are given in Annexure 19.10.5.

The Academic Council may consider and ratify the same with effect from the Academic Year 2021-22.

Resolution:

After deliberations, the agenda item was ratified with effect from the Academic Year 2022-23.

DEPARTMENT OF INFORMATION TECHNOLOGY

Item 19.11

To consider and approve the recommendations of the Board of Studies of the Department of Information Technology.

Item 19.11.1

To consider and approve the curriculum and syllabi of M.Tech. Information Technology under Regulations 2022.

Note to Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and

employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 16th meeting of Board of Studies of Information Technology Department, which was held on 18th August 2022, the curriculum and syllabi of M.Tech. Information Technology, under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic Council.

The salient features of M.Tech. Information Technology under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II (AY 2022-2023)

a) New core courses introduced

Course Code	Course Title	Credits
CSE 610	Multicore Computer Architecture	3
ITE 6202	Machine Learning Algorithms	4
ITE 6203	Machine Learning Lab	1
ITE 6204	Cloud Middleware Tools	1

b) New Elective courses introduced

Course Code	Course Title	Credits
ITEY 205	Cloud Services	3
ITEY 206	Cloud Security	3
ITEY 207	Web Design & Management	3
ITEY 208	Information Visualization Techniques	3
ITEY 209	Agile Software Development	3
ITEY 210	DevOps	3
ITEY 211	Computer Vision	3
ITEY 212	Image and Video Analytics	3

c) Elective Courses with Syllabus revisions

Course Code	Course Title	Credits	Revision (%)
ITEY 101	Computer Forensics and Information Security	3	50%
ITEY 204	Applied Cryptography	3	20%

II. Semester III & IV

a) New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
ITEY 113	Text, Web and Social Media Analytics	3
ITEY 119	Analytics of Things	3

b) Elective Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
ITEY 111	Deep Learning	3	20%
ITEY 115	Software Project Management	3	20 %
ITEY 117	Green Computing Technology	3	30%

The curriculum and syllabi of M.Tech. Information Technology under R 2022 are given in Annexure 19.11.1.

The Academic Council may consider and approve the same for implementation from the academic year 2022-2023.

Discussions:

The expert members suggested to explore offering courses related to cloud services and cloud security as core courses after deliberations in the upcoming BOS of department of Information Technology.

Resolution:

After deliberations, the agenda item was approved.

Item 19.11.2

To consider and approve the syllabi (V - VIII sem. core courses and professional electives) of B.Tech. Information Technology under Regulations 2021.

Note on Agenda:

The major revisions in curriculum of B.Tech. Information Technology under Regulations 2021 and syllabi of (I – IV semester) courses were approved in the 17th & 18th meeting of Academic Council respectively. In the 16th meeting of Board of Studies of Information Technology Department, which was held on 18th August 2022, the syllabi of (V - VIII sem. core courses and professional electives) of B.Tech. Information Technology under Regulations 2021 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The salient features of B.Tech. Information Technology curriculum under R 2021 with respect to “Introduction of New courses” and “Courses with Syllabus revisions’” are as follows:

I. Semester V & VI

a) New courses introduced:

i) Core courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
ITD 3103	MEAN Stack Web Development	3

ii) Elective courses (proposed): Academic Year 2023-24

ITDX06	Swift Programming	3
ITDX07	Introduction to NoSQL Databases	3
ITDX08	Computational Intelligence	3
ITDX12	E-Commerce and Digital Marketing	3
ITDX32	GPU Architecture and Programming	3
ITDX52	Predictive Analytics	3
ITDX53	Mathematical Foundation for Data Sciences	3
ITDX54	Data Science Using Python	3
ITDX63	Virtualization Techniques	3
ITDX64	Fog Computing	3
ITDX65	Cloud Services and Platforms	3
ITDX11	Introduction to DevOps	3

b) Courses with syllabus revisions:

i) Core courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
ITD 3104	AI and Machine Learning	4	50%
ITD 3201	Software Testing	3	20%
ITD 3202	Cloud Computing Technologies	3	30%

ii) Elective Courses (proposed): Academic Year 2023-24

ITDX 09	Natural Language Processing	3	20%
ITDX 10	C# and .NET Framework	3	90%

ITDX 28	Wireless Network	3	50%
ITDX 42	Programming in R	3	60 %
ITDX 44	Data Mining Techniques and Tools	3	20%
ITDX 46	Soft Computing	3	40%
ITDX 62	Distributed Computing	3	30%
ITDX 72	Security Analyst Fundamentals	3	90%

II. Semester VII & VIII

a) New Elective courses (proposed): Academic Year 2024-25

ITDX 17	Agile Methodologies	3
ITDX 19	Functional Programming	3
ITDX 31	Python for IoT	3
ITDX 32	GPU Architecture and Programming	3
ITDX 33	Software Defined Networks	3
ITDX 47	Analytics of Things	3
ITDX 49	Scalable Data Science	3
ITDX 50	Deep Learning	3
ITDX 51	Computer Vision and Image Processing	3
ITDX 52	Predictive Analytics	3
ITD3106	Internship	1
GEDX 121	Introduction to Artificial Intelligence	3
GEDX 114	Fundamentals of Data Science and Machine Learning	3

b) Core Courses with syllabus revisions (proposed): Academic Year 2024-25

Course Code	Course Title	Credits	Revision (%)
ITD 4101	Internet of Things	3	50%

c) Elective Courses with syllabus revisions (proposed): Academic Year 2024-25

ITDX 14	Virtual Reality	3	90%
ITDX 18	Game Theory	3	80%
ITDX 62	Distributed Computing	3	30%
ITDX 76	Cyber Forensics	3	90%

The Curriculum and syllabi of the courses (V - VIII sem. core and professional elective courses) of B.Tech. Information Technology under R 2021 are given in Annexure

The curriculum and syllabi of the courses offered to M.C.A. and M.Tech. programmes under R 2022 are given in Annexure 19.13.4.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

SCHOOL OF LIFE SCIENCES

Item 19.14

To consider and approve the recommendations of the Board of Studies of the School of Life Sciences.

Item 19.14.1

To consider and approve the curriculum and syllabi of M.Tech. Biotechnology under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 9th meeting of Board of Studies of School of Life Sciences, which was held on 20th August 2022, the curriculum and syllabi of M.Tech. Biotechnology under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Tech. Biotechnology curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) New courses introduced: Academic Year 2022-23

Course Code	Course Title	Credits
LTE 6102	Advanced Biochemistry and Metabolic Regulation	3

LTE 6202	Bioprocess and Fermentation Technology	3
LTEY022	Structural Biology	4
LTEY023	Bio-catalysis and Enzyme Reaction	3
LTEY025	Aromatic and Medicinal Plants	4
LTEY026	Functional Foods and Nutraceuticals	3
LTEY 027	Food Processing technology	3
LTEY 028	Industrial and Pharmaceutical Technology	3
LTEY 031	Dairy Technology	3
LTEY 032	Tissue Engineering and regenerative Medicine	3

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
LTE 6104	Microbial Biotechnology	3	20
LTE 6105	Cell and Molecular Biology	3	20
LTE 6106	Lab I (Biochemistry/Immunotechnology / Microbial Biotechnology)	2	30
LTE 6201	Genomics and Proteomics	3	20
LTE 6203	Computational Biology	4	20
LTE 6204	Lab II (Fermentation Technology / Computational Biology)	2	30
LTEY024	Biomedical Instrumentation Technology	3	20

II. Semester III & IV

a) Introduction of New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
LTEY034	Regulatory Affairs in Biotechnology	3
LTEY035	Biosensors and Biochips	3
LTEY036	Ethical Issues in Biotechnology and Engineering	3

b) Course with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
LTE 7102	Lab III (Plant and Animal Biotechnology)	1	30

The curriculum and syllabi of M.Tech. Biotechnology under R 2022 are given in Annexure 19.14.1.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 19.14.2

To consider and approve the curriculum and syllabi of M.Tech. Food Biotechnology under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Tech. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 9th meeting of Board of Studies of School of Life Sciences, which was held on 20th August 2022, the curriculum and syllabi of M.Tech. Food Biotechnology under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Tech. Food Biotechnology curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
LTE 6111	Chemistry of Foods	4	20
LTE 6112	Advanced Nutritional Biochemistry	4	20
LTE 6113	Modern Food Microbiology	3	20
LTE 6101	Applied Biostatistics f Biotechnologists	4	20
LTE 6114	Lab I (Nutritional Biochemistry/ Food Microbiology)	2	30

LTE 6212	Applied Food Biotechnology	4	20
LTE 6211	Technology in Food Packaging	4	20
LTE 6213	Lab II (Food Packaging/ Applied Food Biotechnology)	2	30

II. Semester III & IV

a) Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
LTE 7112	Lab III (Enzymes in Food Industry)	1	30
LTE 7111	Applications of Enzymes in Food Industry	3	20

The curriculum and syllabi of M.Tech. Food Biotechnology under R 2022 is given in Annexure 19.14.2.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 19.14.3

To consider and approve the curriculum and syllabi of M.Sc. Biotechnology under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Sc. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 9th meeting of Board of Studies of School of Life Sciences, which was held on 20th August 2022, the curriculum and syllabi of M.Sc. Biotechnology under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Sc. Biotechnology curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) Introduction of New courses: Academic Year 2022-23

Course Code	Course Title	Credits
LSE 6101	Plant and Animal Physiology	3
LSE 6102	Biochemistry	4
LSE 6103	Principles of Microbiology	4
LSE 6203	Genetics	3
LSEY101	Biostatistics	3
LSEY105	Food Biotechnology	3
LSEY104	Medical Biotechnology	3

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
LSE 6104	Cellular and Molecular Biology	4	20
LSE 6105	Lab I (Biochemistry/ Microbiology/ Cell and Molecular Biology)	2	30
LSE 6201	Bioinformatics	4	20
LSE 6202	Immunotechnology	3	20
LSE 6204	Lab II (Bioinformatics/Immunology/ Genetics)	2	30

II. Semester III & IV

a) New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
LSE 7101	Developmental Biology and Stem Cell Technology	3
LSE 7102	Ecology and Environmental Biotechnology	3
LSE 7103	Advanced Instrumentation	3
LSEY112	Medical Coding	3
LSEY113	Gene Manipulation	3

b) Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
LSE 7104	Lab III (Stem cell Technology/ Environmental Biotechnology/ Advanced Instrumentation)	2	30

The curriculum and syllabi of M.Sc. Biotechnology under R 2022 are given in Annexure 19.14.3.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 19.14.4

To consider and approve the curriculum and syllabi of M.Sc. Microbiology under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Sc. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 9th meeting of Board of Studies of School of Life Sciences, which was held on 20th August 2022, the curriculum and syllabi of M.Sc. **Microbiology** under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Sc. **Microbiology** curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) New courses introduced: Academic Year 2022-23

Course Code	Course Title	Credits
LSE 6121	Microbial Genetics	4
LSE 6103	Principles of Microbiology	4

LSE 6222	Bioprocess and Fermentation Technology	3
LSEY101	Biostatistics	3
LSEY121	Microbial Diversity and Extremophiles	3
LSEY122	Microbial Physiology and Metabolism	3
LSEY123	Parasitology	3
LSEY213	Host-microbe Interactions	3

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
LSE 6104	Cell and Molecular Biology	4	20
LSE 6122	Lab I (Genetics/ Microbiology/ Cell and Molecular Biology)	2	30
LSE 6221	Environmental and Medical Microbiology	3	20
LSE 6202	Bioinformatics	4	20
LSE 6223	Lab II (Bioinformatics/ Medical Microbiology/ Fermentation Technology)	2	30

II. Semester III & IV

a) New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
LSEY132	Microbial Systems Biology	3
LSEY113	Gene Manipulation	3

b) Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
LSE 7121	Industrial, Food and Agricultural Microbiology	4	20
LSE 7122	Immuonology	4	20
LSE 7123	Lab III (Food and Agricultural Microbiology/Immunology)	2	30

The curriculum and syllabi of M.Sc. **Microbiology** under R 2022 are given in

Annexure 19.14.4.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

Item 19.14.5

To consider and approve the curriculum and syllabi of M.Sc. Biochemistry and Molecular Biology under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Sc. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 9th meeting of Board of Studies of School of Life Sciences, which was held on 20th August 2022, the curriculum and syllabi of M.Sc. **Biochemistry and Molecular Biology** under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Sc. **Biochemistry and Molecular Biology Curriculum** under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) New courses introduced: Academic Year 2022-23

Course Code	Course Title	Credits
LSE 6141	Biomolecules and Bioenergetics	4
LSE 6103	Principles of Microbiology	3
LSE 6201	Enzymes and Intermediary Metabolism	3
LSE 6202	Molecular Endocrinology	3
LSEY141	Plant Biochemistry	3
LSEY142	Nutritional Biochemistry	3
LSEY143	Molecular Physiology	3
LSEY221	Biochemistry of Signal Transduction and Regulation	3

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
LSE 6104	Cell and Molecular Biology	4	20
LSE 6142	Lab I (Biomolecules/ Microbiology /Cell and Molecular Biology)	2	30
LSE 6241	Bioinformatics	4	20
LSE 6242	Lab II (Enzymes/ Bioinformatics)	2	30

II. Semester III & IV

a) New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
LSEY118	Forensic Science	3
LSEY119	Biology of Cancer and Stem Cells	4
LSEY112	Medical Coding	3

b) Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
LSE 7141	Advanced Clinical Biochemistry	4	20
LSE 7122	Immunology	4	20
LSE 7143	Lab III (Clinical Biochemistry/ Immunology)	2	30

The Curriculum and syllabi of M.Sc. **Biochemistry and Molecular Biology** under R 2022 are given in Annexure 19.14.5.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

SCHOOL OF PHYSICAL AND CHEMICAL SCIENCES

DEPARTMENT OF PHYSICS

Item 19.16

To consider and approve the recommendations of Board of Studies of the Department of Physics.

Item 19.16.1

To consider and approve the curriculum and syllabi of M.Sc.(Physics) under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Sc. Physics Programme once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 12th meeting of Board of Studies of Physics Department, which was held on 30th June 2022, the curriculum and syllabi of M.Sc. under R 2022 was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The Salient features of M.Sc. Physics curriculum under R 2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) New courses introduced: Academic Year 2022-23

Course Code	Course Title	Credits
PHE 6104	Analog, Digital Electronics and Instrumentation	4
PHE6105	Advanced Electronics Laboratory	2
PHE 6204	Materials Science Lab – I	2
PHE 6205	Optics and Thermal Lab	2

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
PHE 6101	Classical Mechanics	4	80%

PHE 6201	Quantum Mechanics	4	50%
PHE 6202	Solid State Physics	3	70%
PHEY101	Crystal Growth Techniques	3	10%
PHEY102	Materials processing	3	10%
PHEY103	Materials Characterization	3	10%
PHEY104	Smart materials and structures	3	10%
PHEY105	Advanced Optics &Laser Technology	3	10%
PHEY106	Nonlinearoptics	3	10%
PHEY107	Optical Fiber communication	3	10%
PHEY 107	Nanoscience and Technology	3	10%
PHEY 108	Laser spectroscopy and its applications	3	10%
PHEY 201	Electro-Opticmaterials and devices	3	10%
PHEY 202	Ferroelectric materials and evices	3	10%
PHEY 203	Structure and properties of alloys	3	10%
PHEY 204	Photonic materials and devices	3	10%
PHEY 205	Numerical methods and programming	3	10%
PHEY 206	Ultrasonics and Non-Destructive Testing	3	10%
PHEY 207	Optoelectronic devices	3	10%
PHEY 208	Biophotonics	3	10%
PHEY 209	Chaos, Solitons and Fractals	3	10%

II. Semester III & IV

a) New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits
PHE 7101	Laser and Non Linear Optics	3
ENE 6181	English for Career Development	3
PHE 7105	Materials Science Lab – II	2

b) Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
PHE7102	Thermodynamics and Statistical Physics	3	80%
PHE 7103	Nuclear and Particle Physics	3	30%
PHEY 301	Mathematical methods for nonlinear science	3	10%
PHEY 302	Measurements and Instrumentation	3	10%
PHEY 303	Biomedical Instrumentation	3	10%
PHEY 304	Radiation Physics	3	10%
PHEY305	Density Functional Theory	3	10%
PHEY 306	Nanophotonics	3	10%
PHEY307	Optical computing	3	10%
PHEY 308	Thin film science and technology	3	10%
PHEY 309	Corrosion science and technology	3	10%
PHEY 310	Biomaterials	3	10%
PHEY 311	Advanced Materials for Energy Applications	3	10%

The curriculum and syllabi of M.Sc. Physics under Regulations 2022 are given in Annexure 19.16.1.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

DEPARTMENT OF CHEMISTRY

Item 19.17

To consider and approve the recommendations of Board of Studies of the Department of Chemistry.

Item 19.17.1

To consider and approve the curriculum and syllabi of M.Sc. Chemistry under Regulations 2022.

Note on Agenda:

The Institution follows the best practice of effecting major revision in curriculum and syllabi of M.Sc. Programmes once in three years considering the dynamic changes in the industry, introduction of new technology and techniques, emerging trends, employment opportunities and feedback from stakeholder's viz., students, parents, faculty, alumni and employers. This is in addition to the revision in curriculum and syllabi of programmes facilitated once in six months.

In the 12th meeting of Board of Studies of Chemistry Department, which was held on 17th July 2022, the curriculum and syllabi of M.Sc. Chemistry under R 2022 was deliberated. After deliberations, the Board has recommended the same for the approval in the Academic council.

The Salient features of M.Sc. Chemistry curriculum under R2022 with respect to "Introduction of New courses" and "Courses with Syllabus revisions'" are as follows:

I. Semester I & II

a) New courses introduced: Academic Year 2022-23

Course Code	Course Title	Credits
CHE6102	Thermodynamics and Chemical Equilibria	3
CHE6104	Laboratory Techniques in Organic Synthesis	2
CHE6105	Experiments on the determination of Thermodynamics and Chemical Equilibria parameters	2
CHE6202	Kinetics and Electrochemistry	3
CHE6203	Multistep Synthesis and Characterization of Organic Compounds	2
CHE6204	Experiments on Kinetics and Electrochemical Parameters	2
CHEY021	Green and Sustainable Chemistry	3
CHEY013	Nanotechnology and Catalysis	3

b) Courses with Syllabus revisions: Academic Year 2022-23

Course Code	Course Title	Credits	Revision (%)
Core Courses			
CHE6101	Stereochemistry and Reaction Mechanisms	3	25
CHE6103	Fundamentals of Inorganic Chemistry	3	25

CHE6106	Inorganic Chemistry Practical	2	10
GEE62XX	Research Methodology and IPR	3	25
CHE6201	Synthetic and Spectroscopic Organic Chemistry	3	60
CHE6205	Inorganic Chemistry Practical	2	10
CHEY001	Analytical Techniques	3	25
CHEY002	Transition and Inner Transition Elements Chemistry	3	20
CHEY003	Molecular Spectroscopy	3	20
CHEY004	Photophysics and photochemistry	3	20
CHEY014	Protective Coatings	3	10
CHEY015	Corrosion and Corrosion Control	3	10
CHEY016	Polymer Technology	3	10

II. Semester III & IV

a) New courses (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
CHE7101	Retrosynthetic Analysis and Heterocyclic Compounds	3	70
CHEY023	Alternative Energy Resources	3	60

b) Courses with syllabus revisions (proposed): Academic Year 2023-24

Course Code	Course Title	Credits	Revision (%)
Core Courses			
CHE7102	Quantum Chemistry and Group Theory	3	10
CHE7103	Organometallic Chemistry	4	20
CHE7104	Structural Interpretation of Materials	3	10
Elective Courses			
CHEY005	Bioorganic Chemistry	3	30
CHEY006	Chemistry of heterocyclic compounds and Natural Products	3	30
CHEY007	Biochemistry	3	10
CHEY008	Medicinal and Pharmaceutical chemistry	3	50
CHEY009	Chemistry of carbohydrates	3	10

CHEY010	Advanced concepts in organic synthesis	3	10
CHEY011	Pharmaceutical Technology	3	10
CHEY012	Elemental Forensic Chemistry	3	10
CHEY017	Polymer Structure and Property Relationship	3	50
CHEY018	Electrochemical Energy Conversion and Storage	3	10
CHEY019	Industrial Electrochemistry	3	10
CHEY020	Surface Coating Technology	3	10
CHEY022	Industrial Pollution Control	3	30
CHEY024	Solar Energy	3	10
CHEY025	Fuel Cells For Sustainable Energy Production	3	15
CHEY026	Biomass for Energy Applications	3	10
CHEY027	Environmental Chemistry	3	10

The curriculum and syllabi of M.Sc. Chemistry under Regulations 2022 are given in Annexure 19.17.1.

The Academic Council may consider and approve the same for implementation from the Academic Year 2022-23.

Resolution:

After deliberations, the agenda item was approved.

SCHOOL OF SOCIAL SCIENCES AND HUMANITIES

DEPARTMENT OF ENGLISH

Item 19.18

To consider and approve the recommendations of Board of Studies of the Department of English.

Item 19.18.1

To consider and approve the curriculum and syllabi of the new programme B.A. English under Regulations 2021.

Note on Agenda:

The starting of the new programme B.A. English from the AY 2022-23 was already approved in the 18th meeting of the Academic Council held on 24.02.2022.

The curriculum of B.A. English under Regulation 2021 was framed in alignment with

Vote of thanks by Registrar

The Registrar thanked all the members of the Academic Council, in particular, the expert members from academic and industry for their valuable time, active participation and useful suggestions for the holistic development of academic activities of the Institution.

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