B.S. Abdur Rahman ™
Crescent
Institute of Science & Technology
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ANNEXURE 1.1.1

S. No.	Details	Page No.
1.	Curriculum of Programme indicating POs, PSO and Cos of B.Tech. Mechanical Engineering	2
2.	Sample BoS Meeting of Department of Information Technology held on 18.08.2022	15
3.	Excerpts of Academic Council Meeting held on 13.04.2023	17

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REGULATIONS 2021

CURRICULUM AND SYLLABI (I - IV Semesters)

(Amendments updated upto February 2022)

B.TECH. MECHANICAL ENGINEERING

VISION AND MISSION OF THE INSTITUTION

VISION

B.S.Abdur Rahman Crescent Institute of Science and Technology aspires to be a leader in Education, Training and Research in multidisciplinary areas of importance and to play a vital role in the Socio-Economic progress of the Country in a sustainable manner.

MISSION

- To blossom into an internationally renowned Institute.
- To empower the youth through quality and value-based education.
- To promote professional leadership and entrepreneurship.
- To achieve excellence in all its endeavors to face global challenges.
- To provide excellent teaching and research ambience.
- To network with global Institutions of Excellence, Business, Industry and Research Organizations.
- To contribute to the knowledge base through Scientific enquiry, Applied Research and Innovation.

DEPARTMENT OF MECHANICAL ENGINEERING

VISION AND MISSION

VISION

To excel in providing quality education and training through Undergraduate and Postgraduate programs and carryout quality research in the field of Mechanical Engineering.

MISSION

- To provide a good learning experience through appropriate design of curriculum and syllabi that facilitate students to gain thorough understanding of the fundamental concepts and applications in Mechanical Engineering

- To equip students to solve challenging problems in Mechanical Engineering and related areas taking in to account their impact on the society

- To facilitate students to develop good communication, leadership and managerial skills through team approach in conducting experiments and projects

- To pursue academic and collaborative research activities with industry and other research institutions ensuring high quality in publications and other research outputs

PROGRAMME EDUCATIONAL OBJECTIVES AND OUTCOMES

B.TECH. (MECHANICAL ENGINEERING)

PROGRAMME EDUCATIONAL OBJECTIVES

- To induce a sense of excitement in learning by adapting a holistic approachthrough well designed curriculum, pedagogy and evaluation for a successful professional career
- To provide a strong foundation in physical sciences and analytics to enablecomprehensive understanding of the basic principles of Mechanical Engineering
- To develop knowledge and skill in applying engineering principles to conceive, design, analyze, manufacture, maintain and recycle engineering systems and components
- To equip the students with essential fundamental knowledge not only in thefacets of Mechanical Engineering but also from other relevant disciplines to infuse a multi-disciplinary approach
- To enhance the spirit of inquiry through projects, internships leading todevelopment of creativity, self-confidence and team spirit
- To provide necessary ambience with scope for developing communicationand life skills so as to meet the needs of the society in the globalized environment

PROGRAMME OUTCOMES

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

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

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

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

- Create, select, and apply appropriate techniques, resources, and modern engineering and IT toolsincluding prediction and modelling to complex engineering activities with an understanding of the limitations

- Apply reasoning informed by the contextual knowledge to assesssocietal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professionalengineering practice

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

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

- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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

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

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

PROGRAMME SPECIFIC OUTCOMES

- Apply the principles of Engineering to Model, Analyze, Design and realize physical components, processes and systems
- Work professionally in the Mechanical Systems

MED 1211	ENGINEERING MATERIALS	L	T	P	C
SDG: 9		3	0	0	3

COURSE OBJECTIVES:

COB1: To study the classification of materials and selection of materials.

COB2: To learn about ferrous materials and their applications.

COB3: To impart the knowledge about various non-ferrous materials.

COB4: To educate different types of polymer materials and their applications.

COB5: To learn about different ceramic, glasses and carbon materials.

MODULE I CLASSIFICATION OF MATERIALS AND MATERIAL SELECTION **L:7**

Engineering materials and their classification: Metals/ Ceramics/Polymers/Glasses, Composites - Material Properties: Mechanical, Physical, Chemical, Electrical, Thermal, Dielectric, Semi-conducting properties of materials, and Degradation of materials - Structure-Property-Processing relationship, Selection of materials for different engineering applications.

MODULE II FERROUS MATERIALS AND THEIR APPLICATIONS **L:10**

Wrought iron - Types of steel and its applications: Carbon steels (low, medium, high), Alloy steel (manganese, silicon, nickel, titanium, copper, chromium, and aluminum), Stainless steel (austenitic, ferritic, martensitic), Tool steel (tungsten, molybdenum, cobalt and vanadium), Special steels - Cast iron types, properties and applications: Grey cast iron, White cast iron, Malleable cast iron, Nodular cast iron, Chilled cast iron, Alloy cast iron.

MODULE III NON-FERROUS MATERIALS AND THEIR APPLICATIONS **L:10**

Properties and applications: Copper and its alloys - Aluminium and its alloys - Lead and its alloys - Zinc and its alloys - Tin and its alloys - Titanium and its alloys - Nickel and its alloys - Magnesium and its alloys.

MODULE IV POLYMER MATERIALS **L:9**

Properties and applications of thermoplastic materials: Polyethylene or Polythene (HDPE, LDPE), Polyvinylchloride (PVC), Polycarbonate (PC),

Polypropylene(PP), Teflon or Polytetrafluoroethylene (PTFE), Polystyrene (PS), Acrylics (Polymethyl Methacrylate PMMA), ABS (Acrylonitric Butadiene Styrene), Silicones, Polyvinylidene Chloride, Polyamides (PA), Polybutylene terephthalate (PBT), Polyether ether ketone (PEEK), Polyphenylene sulfide (PPS) - Properties and applications of thermoset materials: Polyester resin, Polyurethanes, Bakelite, Urea-formaldehyde, Epoxy resin, Polyimides, Furan - Properties and applications of rubber materials - Natural rubber and Synthetic rubber

MODULE V GLASS, CERAMIC AND CARBON MATERIALS L:9

Properties and applications of glasses: Float glass, Shatterproof glass, Laminated glass, Chromatic glass, Tinted glass, Toughened glass, Glass blocks - Properties and applications of ceramic materials: Clay products, Cements, Oxides: Alumina, Beryllia, Ceria, Zirconia. Non-oxides: Carbide, Boride, Nitride, Silicide, Properties and applications of Carbon, Graphite, Graphene and Diamond.

L – 45; Total Hours – 45

TEXT BOOKS:

1. J.W. Martin, “Materials for Engineering”, Third edition, Woodhead Publishing Limited and CRC Press LLC, 2006.
2. George Murray, Charles V. White, Wolfgang Weise, “Introduction to Engineering Materials”, 2nd Edition, CRC Press LLC, 2007.
3. C. P. Sharma, “Engineering Materials: Properties and Applications of Metals and Alloys”, PHI Learning Pvt. Ltd., 2003.
4. B.K.Agarwal, “Introduction to Engineering Materials”, Tata McGraw Hill, 2008.

REFERENCES:

1. Michael F. Ashby, Kara Johnson, “Materials and Design”, Third Edition. The Art and Science of Material Selection in Product Design, Butterworth-Heinemann, 2014.
2. Hans Berns, Werner Theisen, “Ferrous Materials: Steel and Cast Iron”,1st Edition, Springer-Verlag Berlin Heidelberg, 2008.
3. M. Spittel, T. Spittel (auth.), H. Warlimont, “Landolt-Börnstein - Group VIII Advanced Materials and Technologies 2C2: Advanced Materials and Technologies, Part 1& 2& 3: Non-ferrous Alloys - Light Metals”, 1st Edition, Springer-Verlag Berlin Heidelberg, 2011.
4. James F. Shackelford, William Alexander, “Polymer Materials Science and Engineering Handbook”, 3rd Edition, CRC Press, 2000.

5. Philippe Boch, “Jean-Claude Nièpce Ceramic Materials: Processes, Properties and Applications”, 1st edition, Wiley-ISTE, 2007.
6. Hugh O. Pierson, “Materials Science and Process Technology, Handbook of Carbon, Graphite, Diamond, and Fullerenes: Properties, Processing, and Applications”, William Andrew, 1995.

COURSE OUTCOMES:

After completion of the course, students should be able to

CO1:select the suitable materials based on their properties

CO2:explain the different types of ferrous materials and its applications

CO3:compare the properties of different non-ferrous materials

CO4:recognize the different types of polymer materials and its applications

CO5:choose ceramic materials, glasses and carbon materials for specific Applications

Board of Studies (BoS) :
18th BoS of MECH held on 21.06.2021

Academic Council:
17th AC held on 15.07.2021

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	M				M					L		L		H
CO2	M				M					L		L	H	
CO3	M				M					L		L	H	
CO4	M				M					L		L	H	
CO5	M				M					L		L	H	

Note: L- Low Correlation M - Medium Correlation H -High Correlation

SDG 9: Build resilient Infrastructure, promote inclusive and sustainable industrialization and foster innovation.

The holistic understanding of engineering materials and components leads to construction of resilient infrastructure and sustainable industrialization.

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SCHOOL OF COMPUTER, INFORMATION AND MATHEMATICAL SCIENCES

DEPARTMENT OF INFORMATION TECHNOLOGY

18.08.2022

Minutes of the Sixteenth Meeting of Board of Studies – 18.08.2022

The sixteenth meeting of the Board of Studies of IT department was held on 18-08-2022 at 9.30 a.m. in the Conference Hall of IT department. The following members/ spl. invitees were present.

1. Dr. P. AnandhaKumar, Professor, Department of Information Technology, MIT – Anna University, Chrompet, Chennai
2. Mr. M. Valluvan, CEO, Vyasaka Technologies Pvt Ltd, Plot No. 5179, Ram Nagar North Extn, 8th Street, Puzhuthivakkam, Chennai – 91
3. Mr. Srihari Sridharan, Lead Consultant, Thoughtworks Technologies, International Tech Park, Zenith – 9th Floor, Ascendas, Taramani Link Road, Taramani, Chennai – 600113.
4. Dr. I. Sathik Ali, HoD/ IT, Chairman - Board of Studies.
5. Dr. Latha Tamilselvan, Professor/ IT.
6. Dr. Munir Ahamed Rabbani, Professor/ IT.
7. Dr. M. Kabeer, Associate Professor/ IT.
8. Dr. N. Prakash, Associate Professor/ IT.
9. Dr. G. Kavitha, Associate Professor/ IT.
10. Dr. P. Latchoumy, Associate Professor/ IT.
11. Dr. N. Rajendran, Assistant Professor (Sr. Gr.)/ IT
12. Mr. A. Anantha Krishnan, Technical Specialist, Genesis Telco Lab (Alumni, spl invitee)

Dr. I. Sathik Ali, HOD/IT chaired the meeting and welcomed the members. The details of discussion in the meeting are given below.

Item 15.1: Confirmation of the minutes of the Fifteenth Meeting of BoS.

The Board **resolved to confirm** the minutes of the fifteenth meeting held on 16.12.2021. The confirmed minutes are given in Annexure I.

12/09/2022
Dean, AA

Dr. M.S. HAJI SHEIK MOHAMMED
B.E., M.S., Ph.D., MICI, MASCE, MRILEM, MNACE
Dean (Academic Affairs)
B.S. Abdur Rahman Crescent Institute of Science & Technology
Vandalur, Chennai - 600 048, India

Item 16.2: Approval for revamping of Syllabi of B.Tech. (IT) Programme, Regulations – 2021 from V semester to VIII semester.

Based on the feedback obtained from the various stake holders viz., employers, alumni, faculty, students and also from the school level advisory committee meeting (held on 16.06.2021) and the fourteenth meeting of BoS (held on 23.06.2021), Syllabi (Semester V - VIII) of B.Tech. – IT Regulations 2021 were framed.

The details of discussion in the meeting are given below.

- Dr. Ananthakumar well appreciated the Curriculum design of the B.Tech – IT. He told that the B.Tech – IT curriculum and syllabi were revamped in order to fulfil the current IT industry needs.
- Mr. Srihari suggested to include React JS in addition to Angular JS in the course "MEAN - Stack Development".
- Mr. Srihari, Mr. Anantha Krishnan and Mr. Valluvan suggested to reduce number of exercises for lab courses.

It was resolved to approve the revamped B.Tech – IT syllabi (Semester V to VIII) under Regulations 2021 given in Annexure II.

Item 16.3: Approval for revamping of Curriculum and Syllabi of M.Tech. (IT) Programme, Regulations – 2022

Based on the feedback obtained from the various stake holders viz., employers, alumni, faculty and students and also from the school level advisory committee meeting (held on 16.06.2021) – IT Regulations 2022 were framed.

- Mr. Srihari and Mr. Anantha Krishnan suggested to include Containers, Orchestration and Containerization in a module in the course "Virtualization Techniques".
- It was resolved to approve the revamped M.Tech – IT curriculum and syllabi (Semester I to IV) under Regulations 2022 given in Annexure III.

Item 16.4: Any other item with permission of the Chairman.

The meeting ended with a vote of thanks.

Mr. N. Rajendran
(Member)

Dr. P. Latchoumy
(Member)

Dr. G. Kavitha
(Member)

Dr. N. Prakash
(Member)

Dr. M. Kabeer
(Member)

Dr. Latha Tamilselvan
(Member)

Dr. Munir Ahamed Rabbani, **(Member)**

Mr. A.Anantha Krishnan
(Special Invitee)

Mr. Srihari Sridharan
(External Member)

Mr. M. Valluvan
(External Member)

Dr. P. AnandhaKumar
(External Member)

Dr. I. Sathik Ali
(Chairman - BoS)

Enclosure:

Annexure I – Minutes of the 15th meeting of Board of Studies.
Annexure II – Syllabi (Semester V to VIII) of B.Tech. – IT R 2021.
Annexure III – Curriculum and Syllabi of M.Tech. – IT R 2022.

Excerpts of twentieth Meeting of Academic Council

B.S. Abdur Rahman ™
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Minutes of

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

held on

April 13, 2023

Minutes of the20th meeting of Academic Council

Date: 13.04.2023 **Time: 10.00a.m.**

Venue: Seminar Hall III, Convention Centre **Mode: Blended**

Link for the meeting:
https://us02web.zoom.us/j/83821484271?pwd=T0Y4cHpqYit2emdaZVN1TWs0ZW1UUT09

The following members were attended the meeting:

1. Prof. Dr. T. Murugesan, Pro Vice Chancellor
2. Dr. N. Raja Hussain, Registrar
3. Dr. V. Jagadeesh Kumar, Professor of Electrical Engineering & Dean Academic Courses, IIT Madras, Chennai.
4. Prof. C. Thangamuthu, Former Vice Chancellor, Bharathidasan University, Thiruchirappalli
5. Dr. B. Suresh, MD & CEO, M/s. Mahindra Consulting Engineers Ltd., Chennai.
6. Dr. M. Saravanan, Principal Researcher - Ericsson Research, Artificial Intelligence & Machine Learning Group, Ericsson India Global Services,Perungudi, Chennai
7. Mr. V.N.A. Jalal, Director (Planning & Development)
8. Dr. M. Mohamed Ismail, Dean (Academic Affairs)
9. Dr. J. Revathy, Dean (Research)
10. Dr. Karthikeyan Ramalingam, Dean (Student Affairs)
11. Dr. S. Kaja Mohideen, Controller of Examinations
12. Dr. A. Abudhahir, Director (IQAC) & Professor, Department of Electronics & Instrumentation Engineering
13. Dr. Syed Mohamed Abdul Majeed, Director (Admissions) & Professor ,Dept. of Polymer Engineering
14. Dr. M.S. Haji Sheik Mohammed, Dean (School of Infrastructure)
15. Dr. H. Siddhi Jailani, Dean (School of Mechanical Sciences)
16. Dr. C. Tharini, Dean (School of Electrical & Communication Sciences)
17. Dr. Sharmila Sankar, Dean (School of Computer, Information and Mathematical Sciences)
18. Dr. S. Hemalatha, Dean (School of Life Sciences)
19. Dr. I. Raja Mohamed, Dean (School of Physical and Chemical Sciences)

20. Dr. K. Srinivasan, Dean (Crescent School of Business)
21. Ar. G. Jayalakshmi, Dean (Crescent School of Architecture)
22. Dr. A. Abdul Hai Hasani Nadwi, Dean (School of Arabic & Islamic Studies)
23. Dr. M. Vijaya Vara Prasad, Dean (Crescent School of Pharmacy)
24. Dr. C. Chockalingam, Dean (Crescent School of Law)
25. Dr. Ayub Khan Dawood, Dean (School of Social Science and Humanities)
26. Mr. M. Parvez Alam, CEO, Crescent Innovation and Incubation Centre
27. Dr. A.S. Selva Kumar, Head, Mechanical Engineering
28. Dr. P.N. Kadiresh, Head, Dept. of Aerospace
29. Dr. P.D. Jeyakumar, Head, Dept. of Automobile Engineering
30. Dr. S. Shamshath Begum, Head (Incharge), Department of Polymer Engineering
31. Dr. R. Jayashree, Head, Department of Electrical and Electronics Engineering
32. Dr. B. Vijayalakshmi, Head, Department of Electronics & Communication Engineering
33. Dr. D. Najumnissa Jamal, Head, Department of Electronics & Instrumentation Engineering
34. Dr. W. Aisha Banu, Head, Department of Computer Science Engineering
35. Dr. N. Prakash, Head, Department of Information Technology
36. Dr. S. Pakkir Mohideen, Head, Dept. of Computer Application
37. Dr. Sindhu J. Kumar, Head, Department of Mathematics & AS
38. Dr. G.V. Vijayaraghavan, Head, Department of Physics
39. Dr. N. Hajara Beevi, Head, Department of Chemistry
40. Dr. P Rathna, Head, Department of English
41. Dr. K. Soundarapandiyan, Head, Department of Commerce
42. Dr. M. Shanmugam, Head of Management Studies
43. Dr. A.Jaya, Professor, Dept. of Computer Applications &
Director (Incharge), Centre for Distance and Online Education
44. Dr. Latha Tamilselvan, Professor, Dept. of Information Technology
45. Dr. P. Gajalakshmi, Professor, Department of Civil Engineering
46. Dr. P.K. Jawahar, Professor, Department of Electronics & Communication Engineering
47. Dr. S. Panboli, Professor, Department of Management Studies
48. Dr.S. Sathik Basha, Professor, Dept. of Physics
49. Dr.K. Yogeswari, Professor, Dept. of Civil Engineering
50. Dr.G. Kavitha, Professor, Dept. of Information Technology
51. Dr. M.A. Sai Balaji, Associate Professor, Department of Mechanical Engineering
52. Dr.A. Shajahan, Associate Professor, Department of Chemistry

53. Dr. J. Mahashar Ali, Assistant Professor (Sr. Gr.), Department of Mechanical Engineering
54. Ms. S. Farzana, Assistant Professor, Department of Commerce
55. Dr. P. Panneerselvam, Librarian
56. Mr. S. Visvesh, III year CSE - C Sec, Student
57. Ms. Ashika Rose, II yr, B.Com.(Hons.), Student

Welcome Address by the Pro Vice Chancellor

The Pro Vice Chancellor welcomed the eminent external expert members Prof. C. Thangamuthu, Former Vice Chancellor, Bharathidasan University, Thiruchirappalli; Dr. V. Jagadeesh Kumar, Professor of Electrical Engineering, IIT Madras; Dr. B. Suresh, MD & CEO, M/s. Mahindra Consulting Engineers Ltd., Chennai; Dr. M. Saravanan, Principal Researcher - Ericsson Research, Artificial Intelligence & Machine Learning Group, Ericsson India Global Services, Chennai, and all other internal members of the Academic Council.

ITEMS MOVED BY THE PRO VICE CHANCELLOR

Report on the academic activities of the Institution from previous Academic Council Meeting held on 29th September 2022 till date was presented by the Pro Vice Chancellor.

I. ACADEMIC ACTIVITIES

a. Even Semester 2022-23: Academic Activities& Examinations

- The even semester of academic year 2022-23 commenced on 19.01.2023 for final year students, 30.1.2023 for intermediate students and 07.03.2023 for the first years.
- The Crescent Mastersoft ERP is being effectively utilized for handling academic activities (configuration of timetable & courses, attendance marking, feedback and upload of course materials etc.) and exam related activities (mark capturing and result declaration).
- The total no. of courses configured in the E-learning portal of Crescent Mastersoft ERP for the current even semester (AY 2022-23) is listed below.

S. No.	Description	Number
1	No. of courses enrolled	**872**
2	No. of courses configured	**1092**

- The Continuous Assessment Tests – II & Semester End Examinations of Odd semester and Continuous Assessment Tests – I of Even Semester (AY 2022-23) for the students of all UG and PG programmes were conducted in the Institution.
- Parent – Teacher meeting for the ODD semester was conducted during 07.11.2022 to 18.11.2022 and for the EVEN semester during 24.03.2022 to 06.04.2022by the Departments / Schools for the AY 2022-23.
- The students were encouraged to enroll in value added courses. The details of the number of courses and students enrolled in IIT Bombay – Spoken Tutorial Courses and SWAYAM/NPTEL courses in the odd semester 2022-23 are:

Details	IIT Bombay – Spoken Tutorial	SWAYAM / NPTEL courses
	Odd semester 2022-23	Odd semester 2022-23
Total number of courses enrolled	**38**	**526**
Total number of faculty involved / registered	**52**	**98**
Total number of students enrolled	**2599**	**753**

- The classes of MBA and MCA in Online Learning (OL) and Open Distance Learning (ODL) mode in the Odd semester 2022-23 was completed as per academic schedule; and classes of Even semester 2022-23 are in progress.
- The orientation programme for "Social Entrepreneurship (MSC 3182)" course is arranged on 22.02.2023 for the V Semester students of ECE, EEE, EIE, CSE, CSE (IOT, AI & DS, CS) and IT. The key resource persons are Mr. Naveed Ahmed, Regional Manager and Mr. Ajay Chandran Jakle, Program Manager from Wadhwani Foundation, Bangalore.

II. RECOGNITION FROM REGULATORY BODIES & MEETINGS OF STATUTORY BODIES

2.1 AICTE

AICTE Approval Process 2023-24

- The Office of Director (IQAC) is in the process of submitting the application for the Extension of Approval (EOA) for the AY 2023-24. The deadline for submission is 6th April 2023.

Submission of Google Form (AICTE):

- Submitted the Google form for Implementation of reservation policy in the appointment of faculty and staff in AICTE approved institutions on 20.02.2023.

2.2 UGC

- Facilitated the UGC Standing Committee Meeting held on 7th December 2022 for the proposed off-campus centre at Madurai.

2.3 AISHE

Submitted the data to All India Survey on Higher Education (AISHE) 2023 on 1st March 2023 and downloaded the certificate.

Meetings of Statutory Bodies

Meetings of various boards, committees and statutory bodies were held as follows:

- ✓ The meeting of the 19th meeting of Academic Council was held on **29th September 2022.**
- ✓ The 17th meeting of the Internal Quality Assurance Cell (IQAC) was held on **26th October 2022**
- ✓ The 48th Research Board meeting was conducted on **06th December 2022 and 10th January 2023**
- ✓ The 49th Research Board meeting was conducted on **31st January 2023**
- ✓ The 10th Planning and Monitoring Board Meeting was conducted on 28th **December 2022.**
- ✓ Meetings of Board of Studies of Departments and Schools were conducted during **December 2022 – March 2023.**
- ✓ Standing Committee Meeting of **20th Academic Council** was conducted on **11.04.2023.**
- ✓ The **22nd Board of Management meeting** was conducted on **09.11.2022.**

III. ACCREDITATION / RANKINGS AND RATINGS

3.1 National Board of Accreditation (NBA)

- ➢ Based on the SAR reports submitted to the NBA, the NBA Expert Team visited our Institute during **24 - 26th March 2023** for the accreditation of the three UG programmes and two PG programmes mentioned below.
  - o B.Tech (ECE)

- B.Tech (CSE)
- B.Tech (IT)
- MBA
- MCA

➢ Arranged the Pre-Mock Visit, Internal Mock Visit and External Mock Visit to review the readiness of the programmes/departments before facing the visit of the NBA Accreditation Expert Team.

- The NBA Pre-Mock Visit was conducted on 25th Feb 2023 for the Institute level Criteria 8, 9 & 10 by the External Expert Dr. S. Baskar, Professor & Dean (R&D), Thiagarajar College of Engineering, Madurai.
- NBA Internal Mock Visit was conducted for the programmes B.Tech (ECE), B.Tech (CSE), B.Tech (IT), MBA, MCA and Institute level criteria 8, 9 & 10 on 8th to 13th March 2023, respectively.

➢ The External Mock Visit was conducted for the following five programmes B.Tech (ECE), B.Tech (CSE), B.Tech (IT), MBA and MCA, on 17th and 18th March 2023. The External Mock Visit committee, comprised of six members, evaluated the above programmes. The external members are 1. Dr. N.C. Shivaprakash, Professor (Retd.), IISC, Bangalore, 2. Dr. K.M. Mehata, Professor (Retd.), Anna University, Chennai, 3. Dr. S. Baskar, Professor & Dean (R & D), Thiagarajar College of Engineering, Madurai, 4. Dr. S. Muttan, Professor, (Retd.), Anna University, Chennai. 5. Dr. G. Vairavel, Professor, SRM Institute of Science and Technology, Chennai. 6. Dr. S. Rajakarunakaran, Vice Principal and Professor & Head (Mechanical), Ramco Institute of Technology, Rajapalayam.

➢ The NBA Expert Team visited our Institute during 24-26 March 2023 to evaluate the three UG and two PG programmes. The visit started with an inaugural meeting on 24th March and ended with an exit meeting on 26th March, as per the NBA schedule. All the conveners and members of the various working committees provided their support for the smooth conduct of the Accreditation visit. The NBA Accreditation Expert Team members are:

S. No	Name of the Expert Member	Designation	Programme Evaluated
1	Chairman: Prof. RAVINDER K. WANCHOO	Professor (Retd.) UICET, Panjab University, Chandigarh.	Institute Level Criteria 8, 9 & 10

2	Prof. P JAYAREKHA	Professor & HOD, Department of Information Science and Engineering, BMS College of Engineering, Bengaluru, Karnataka.	CSE
3	Prof. GIRISH BHOLE	Associate Professor, Veermata Jijabai Technological Institute (VJTI), Maharashtra.	CSE
4	Prof. SAVITA GUPTA	Professor, Panjab University, Chandigarh.	IT
5	Prof. BASAVARAJU	Professor & Head, Department of CSE, Govt. Engineering College, Hassan, Karnataka.	IT
6	Prof. VIVEK KAPUR	Director, G H Raisoni Institute of Engineering and Technology (GHRIETN), Nagpur, Maharashtra.	ECE
7	Dr. KANMANI BUDDHI	Professor, Dept. of Telecommunication Engg, BMS College of Engineering, Bengaluru, Karnataka.	ECE
8	Prof. KARTIK DAVE	Dean, School of Business, Public Policy and Social Entrepreneurship, Dr.B R Ambedkar University, Delhi.	MBA
9	Dr. SACHIN S. VERNEKAR	Dean, Faculty of Management, Bharati Vidyapeeth, Bharati Vidyapeeth Bhavan, Lal Bahadur Shastri Marg, Pune, Maharashtra.	MBA
10	Dr. ROBERT JOHN D SOUZA	Professor, National Institute of Technology Surathkal, Karnataka.	MCA
11	Prof. RITUPARNA CHAKI	Professor, University of Calcutta, West Bengal.	MCA

RANKINGS & RATINGS

3.2 NIRF India Rankings 2023

- Submitted the data to National Institutional Ranking Framework (NIRF) India Rankings 2023 under different categories such as Engineering, Management, Architecture, on 10th January 2023, and Overall which includes Research category on 19th January 2023.

- Replies with appropriate evidence were given through email for the queries received from NIRF India Rankings for the Engineering, Management, Architecture and Overall categories.

3.3 QS World University Ranking (WUR) 2024

- Submitted the data to the QS World University Ranking (WUR) 2024 and QS Asia Ranking 2024 on 6th Feb 2023 and awaiting for the results.

3.4 THE Impact Rankings 2023

- Submitted data for "THE Impact Ranking- 2023" in the following six **SDGs** on 22nd November 2022.

S. No.	SDGs	Name of the SDG
1	SDG 3	Good Health and Well Being
2	SDG 4	Quality Education
3	SDG 6	Clean Water and Sanitation
4	SDG 7	Clean and Affordable Energy
5	SDG 9	Industry Innovation and Infrastructure
6	SDG 17	Partnership for the Goals

- Prepared the following Policy documents for various metrics of SDG 3, SDG 4, SDG 6 and SDG 7.
    1. Smoke-Free and Tobacco-Free Campus
    2. Life-Long Learning Access
    3. Water Management and Reuse
    4. Energy Efficient Renovation and Building
    5. Clean Energy and Divestment

3.5 DATAQUEST 2023

- Submitted the data to the **Dataquest – CMR Best T-School Survey 2023** on 27th Feb 2023.
- Dataquest - CMR **Best T-School Survey 2023** ranked our Institute as the **No. 1** Private Institution in INDIA for three consecutive years – 2021, 2022 & 2023.
    - All India Rank: "1" - Private Category
    - South Zone Rank: "2" - Overall Category
    - All India Rank: "4" - Overall Category

SHARING AND NETWORKING WITH OTHER INSTITUTIONS

- Dr A. Abudhahir, Director (IQAC), Dr. M. Mohamed Thaha, Asst. Director (IQAC) and Dr. N. Rajendran, Asst. Director (IQAC) rendered their services as Resource Persons in a Seminar / Workshop / Webinar / Training / Mentoring organized by various other institutes either online or offline.

S. No.	Name of the Organisation	Details	Date
1	Karunya Institute of Science and Technology, Coimbatore	Staff visited our IQAC office for NAAC clarification	27.10.2022
2	Sri Sai Ram Engineering College, Chennai	Resource Person to the "Interactive Session on Nuances in THE Impact Ranking Process"	31.10.2022
3	KPR Institute of Engineering and Technology, Coimbatore	NBA Mock Audit	01.11.2022 & 02.11.2022
4	Government College of Technology, Coimbatore	Deliver a lecture on "Active Learning Strategies"	26.11.2022
5	LIBA (Loyola Institute of Business Administration)	Staff visited our IQAC office for NIRF Clarification	20.12.2022
6	Sri Venkateswara College of Engineering, Chennai	Staff visited our IQAC office for NIRF Clarification	05.01.2023

IV. ACADEMIC RESEARCH

- Online Webinar on "Understanding Research Metrics for Quality Research" by Mr. M. Cedric Joseph, Chief Executive Officer, Researgence conducted on 2nd Nov 2022.

Research Progress Report (Oct 2022 - March 2023)

Ph.D. Admission:

No. of Scholars admitted in Jan 2023 session	:	**25**
Full time	:	10
Part time	:	15

Fellowships:

BSA JRF fellowships	:	46
Earn while learn fellowships	:	17

The Academic Council may consider and ratify the above list of personality and character development club / activities from the academic year 2022-23.

Resolution:

After deliberations, the agenda item was ratified for implementation from the Academic year 2022 – 23.

SCHOOL OF INFRASTRUCTURE

DEPARTMENT OF CIVIL ENGINEERING

Item 20.7.1

To consider and approve the syllabi (V & VI semester) of B.Tech. Civil Engineering under Regulations 2021.

Note on Agenda:

The major revisions in curriculum of B.Tech. Civil Engineering under R 2021 and syllabi of I & II Semester courses was approved in the 17th meeting of Academic Council and accordingly implemented from the year AY 2021-2022. The syllabi of III & IV semester courses were approved in the 18th meeting of Academic Council and accordingly implemented from the year AY 2022-2023.

In the 18th meeting of Board of Studies of Civil Engineering Department, the syllabi of **V and VI** Semester courses, including relevant 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. Civil Engineering curriculum (V & VI sem.) under R 2021 with respect to “Introduction of New courses” and “Courses with Syllabus revisions’” are as follows:

I. Semester V & VI (AY 2023-2024)

a) New courses proposed:

Course Code	Course Title	Credits
CEDX 17	Waterproofing of Concrete and Masonry Structures	3
CEDX 18	Corrosion Prevention and Control in RC Structures	3
CEDX 20	Intelligent Building Management System	3
CEDX 21	Automation in construction and management	3
CEDX 33	Subsurface Investigation and Report Writing	3
CEDX 56	Water Distribution Systems	3

CEDX 65	Railway Engineering	1
CEDX 66	Airport planning & Engineering	3
CEDX 67	Docks and Harbour Engineering	3
CEDX 75	Islamic Architecture	3

b) Courses with Syllabus revisions:

Course Code	Course Title	Credits	Revision (%)
CED 3101	Structural Analysis II	3	25
CED 3103	Hydraulic and Hydraulic Machinery	4	20
CED 3104	Repair and Rehabilitation of RC Elements	3	25
CED 3105	GIS and its Applications	3	10
CED 3201	Design of Structural Steel Elements	3	20
CED 3202	Construction Management	3	25
CEDX 04	Earthquake Resistant Design of Structures	3	25
CEDX 08	Prefabricated Structures	3	20
CEDX 09	Introduction to Steel-Concrete Composite Structures	3	20
CEDX 23	Housing Planning and byelaws	3	20
CEDX 35	Geo-Environmental Engineering	3	30
CEDX 37	Geo Synthetics	3	30
CEDX 43	Industrial Waste Water Treatment	3	20
CEDX 44	Hazardous Waste Management	3	60
CEDX 45	Environmental Risk Assessment	3	30
CEDX 46	Environmental Impact Assessment	3	20
CEDX 47	Sustainable Water and Sanitation for Smart cities	3	20
CEDX 51	Hydrology	3	20
CEDX 52	Ground Water Engineering	3	20
CEDX 53	Storm Water and Flood Management	3	25
CEDX 62	Urban Planning and Design	2	40
CEDX 64	Pavement Design	2	20
CEDX 72	Remote Sensing	3	10

The syllabi of the courses (V & VI Semester) of B.Tech. Civil Engineering under R 2021 (including syllabi of relevant professional elective courses) is given in **Annexure**

20.7.1.

The Academic Council may consider and approve the same for implementation from the academic year 2023-24.

Resolution:

After deliberations, the above item was approved for implementation from the academic year 2023-24.

Item 20.7.2

To consider and approve the syllabi of open elective courses offered by the Department of Civil Engineering for B.Tech. programmes under Regulations 2021

Note on Agenda:

The Department of Civil Engineering offering open elective courses, for the benefit of other department students' in the VI & VII semester of B.Tech. Programmes under R 2021 were deliberated in the 18th Board of Studies of Civil Engineering Department held on 05.04.2023. After deliberations, the Board has recommended the same for approval in the Academic Council.

The following are the salient details of open elective courses offered by the Department:

I. Semester VI &VII (AY 2023-2024)

a) New courses proposed:

Course Code	Course Title	Credits
GEDX 105	Building Repair Solutions	3
GEDX 229	Waste Water Management	3

b) Courses with Syllabus revisions:

Course Code	Course Title	Credits	Revision (%)
GEDX 209	Disaster Management	3	20
GEDX116	Green Design and Sustainability	3	40

The syllabi of the open elective courses offered by the Department of Civil Engineering for B.Tech. programmes under R 2021 are given in **Annexure 20.7.2.**

The Academic Council may consider and approve the same for implementation from the academic year 2023-24.

Resolution:

After deliberations, the agenda item was approved for the implementation from the academic year 2023-24.

Item 20.7.3

To consider and approve the syllabus of the open elective course "Green Building and Energy Management' offered by the Department of Civil Engineering for M.Tech. programmes under Regulations 2022.

Note on Agenda:

The Department of Civil Engineering offering the open elective course "Green Building and Energy Management" for the benefit of other department students of M.Tech. Programmes under Regulations 2022. The syllabus of this course was deliberated in the 17th Board of Studies of Civil Engineering Department held on 10.08.2022. After deliberations, the Board has recommended the same for approval in the Academic Council.

The following are the salient details of open elective course offered by the Department:

I. Semester III (AY 2023-2024)

a) New course proposed:

Course Code	Course Title	Credits
OEEY	Green Building and Energy Management	3

The syllabus of the open elective course "Green Building and Energy Management" offered by the Department of Civil Engineering to M.Tech. programmes under Regulations 2022 is given in **Annexure 20.7.3.**

The Academic Council may consider and approve the same for implementation from the academic year 2023-24.

Resolution:

After deliberations, the above agenda item was approved for implementation from the academic year 2023-24.

Item 20.7.4

To consider and ratify the revised Programme Educational Objectives of B.Tech. Civil Engineering under R 2021

Note on Agenda:

The Programme Educational Objectives of B.Tech. Civil Engineering under R 2021 were revised by following the guidelines of NBA. The expected attributes of the graduate engineers after 3-5 years of their graduation was measured as a scale for framing PEOs.

These PEOs were deliberated in the 18th Board of Studies of Civil Engineering Department held on 05.04.2023. After deliberations, the Board has recommended the same for ratification in the Academic Council.

The revised PEOs of B.Tech. Civil Engineering under R 2021 is given in **Annexure 20.7.4.**

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

Resolution:

After deliberations, the above item was ratified and considered for the implementation from the academic year 2022-23.

SCHOOL OF MECHANICAL SCIENCES

DEPARTMENT OF MECHANICAL ENGINEERING

Item 20.8

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

Item 20.8.1

To consider and approve the revised curriculum and syllabus of elective courses (II & III semester) of M.Tech. (CAD-CAM) programme under Regulations R2022.

Note on Agenda:

The major revision in the curriculum of M.Tech. (CAD CAM) programme under R 2022 and syllabi of core courses and professional elective courses (Semester I) were approved in the 19th meeting of the Academic Council held on 29.09.2022. In the 21stmeeting of the Board of Studies of the Mechanical Engineering Department, which was held on 10.02.2023, an amendment was proposed in the curriculum by introducing a new elective course based on the suggestion from19th meeting of the Academic Council and syllabus of the professional elective courses (II & III semester) were deliberated. After deliberations, the Board has recommended the same for approval in the Academic Council.

Item 20.22.2

To consider and approve the curriculum and syllabi (I to IV semesters) of B.A.,LL.B (Hons.) and B.B.A.,LL.B (Hons.) under Regulations 2023.

Note on Agenda:

In the 9th meeting of Board of Studies of Crescent School of Law, which was held on 25th March 2023, the curriculum of B.A., LL.B (Hons.) and B.B.A., LL.B (Hons.) (semester I to X) and syllabi (I to IV semesters) were deliberated. After deliberations, the Board has recommended the same for approval in the Academic Council.

The curriculum and syllabi (I to IV semester) of B .A., LL.B (Hons.) and B.B.A., LL.B (Hons.) under R-2023 are given in Annexure 20.22.2(a) and Annexure 20.22.2(b).

a) New courses proposed:

Course Code	Course Title	Credits
BLE 1201	Legal Language	4
BLE 2204	International Relations	4
BLE 3104	Parliamentary system in India	4
BLE 4105	Clinical course - II - Alternative Dispute Resolution Including Mediation	4
BLE 5203	Internship & Practical Training	4

The curriculum and syllabi (I to IV semester) of B .A.,LL.B (Hons.) and B.B.A.,LL.B (Hons.) under R 2023 are given in Annexure 20.22.2(a) and Annexure 20.22.2(b).

The Academic Council may consider and approve the same for implementation from the academic year 2023-24.

Resolution:

After deliberations, the agenda item was approved for implementation from the academic year 2023-24.

Item 20.22.3

To consider and approve the revision in syllabi of (V & VI Semester) core courses of B.A.LL.B (Hons.) and B.B.A.,LL.B (Hons.) under Regulations 2019.

Note on Agenda:

The revision in the following core courses offered for the V & VI Semester in B.A., LL.B (Hons.) and B.B.A., LL.B (Hons.) under R 2019 were deliberated in the 9th of Board of Studies of Crescent School of Law held on 25th March 2023. After deliberations, the Board has recommended the same for approval in the Academic Council.

Courses with Syllabus revision (proposed): AY 2023-24

Course Code	Course Title	Credits	Revision(%)
BLD 3101	Labour Law- I	5	20%
BLD 3201	Labour Law–II	5	20%

The Academic Council may consider and approve the same for implementation from the Academic Year 2023-24.

Resolution:

After deliberations, the agenda item was approved for implementation from the academic year 2023-24.

Vote of thanks by the 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 the Institution.

REGISTRAR

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

VICE CHANCELLOR

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