

GITAM : GANDHI INSTITUTE OF TECHNOLOGY AND ANAGEMENT (Deemed to be University u/s 3 of the UGC Act, 1956) A Category - I Deemed to be University Visakhapatnam | Hyderabad | Bengaluru

#### ACADEMIC YEAR: 2019-20 Alumni Feedback: Action Taken Report

- Feedback received from alumni viz. during annual convocation and meetings of statutory bodies such as Board of studies and Alumni Reunions were analysed and Based on the feedback analysis report, the following views / suggestions / recommendations were considered for further action taken in the academic council
  - i. Courses with more practical components
  - ii. Offering additional electives in different specialization.
  - iii. Placements related training programmes and courses in curriculum
  - iv. Introduction of Interdisciplinary elective courses in the curriculum

Action Taken :

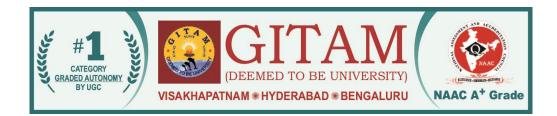
- All Engineering programmes revised the curriculum by giving more weightage to practical components and introduced AIML,IOT relate specialized courses towards industry needs. (B.Tech Bioteh – BOS Minutes)
- 2. Introduced AIML, IOT for B.Tech Engineering students towards industry need and placements (B.Tech CSE BOS Minutes)
- 3. Introduced interdisciplinary electives by EECE (B.Tech ECE BOS Minutes)

Changes are highlighted in Minutes of the 18th meeting of AC & Board of Studies of Faculty Engineering

Radlilla

Director, Academic Affairs

DIRECTOR Directorate of Academic Affairs Gandhi Institute of Technology and Management (GITAM) (Deemed to be University) VISAKHAPATNAM-530 045



### MINUTES OF THE MEETING

18<sup>th</sup> MEETING OF THE ACADEMIC COUNCIL 29<sup>th</sup> August, 2020

Committed to Excellence

### MINUTES OF THE 18<sup>th</sup> MEETING OF THE ACADEMIC COUNCIL HELD AT 10.00 A.M. ON SATURDAY THE 29<sup>th</sup> AUGUST, 2020.

### **Members Present**

S.No.	Name	Position
1	Prof. K. Siva Rama Krishna, Vice-Chancellor	 Chairman
2	Prof. N. Siva Prasad, Pro Vice-Chancellor, HYD	 Member
3	Prof. Degala Sambasiva Rao, Pro Vice-Chancellor, BLR	 Member
4	Prof. Jayasankar Variyar Pro Vice-Chancellor, Academics	 Member
5	Prof. A. Subrahmanyam, Dean, Faculty of Sciences	 Member
6	Prof. Ch.Vijaya Sekhar, Dean, Faculty of Engineering	 Member
7	Prof. M. Saratchandra Babu, Principal, GIS	 Member
8	Prof. S. Ganapaty, Principal, GIP	 Member
9	Prof. K. Mohan, Director, GSoA	 Member
10	Prof. R. Anita Rao, Director, GSoL	 Member
11	Prof. B. Nalini, Director (I/c), GITAM School of Gandhian Studies, VSP	 Member
12	Dr. I. Jyothi Padmaja, Principal, GIMSR	 Member
13	Prof. S. Kanaka Lakshmi, Principal, GSoN	 Member
14	Prof. N. Seetharamaiah, Principal, SoT, HYD	 Member
15	Prof. G. A. Rama Rao, Principal, SoS, HYD	 Member
16	Prof. A.Sree Ram, Director(I/C), HBS, HYD	 Member
17	Prof. G. Shiva Kumar, Principal, SoP, HYD	 Member
18	Prof. G. Sunil Kumar, Director, SoA, HYD	 Member
19	Prof. V.V.V. Nagendra Rao, Director, GSH&SS, HYD	 Member
20	Mr. Sridhar Pabbisetty, Director Kautilya School of Public Policy	 Member
21	Prof. S. Dinesh, Director, SoT, BLR	 Member

22	Prof. D. Shailendra, Director, BSMS, BLR	 Member
23	Prof. K. Srinivas, Principal, SoS, BLR	 Member
24	Prof. Shaik Khasim Beebi, HoD, Dept. of Biotechnology, GIT, VSP	 Member
25	Prof. K.V. Ramesh, HoD, Dept. of Civil Engineering, GIT, VSP	 Member
26	Prof. K. Thammi Reddy, HoD, Dept. of CSE, GIT, VSP	 Member
27	Prof. P.V.Y. Jayasree, HoD, Dept. of EECE, GIT, VSP	 Member
28	Prof. M.R.S. Satyanarayana, HoD, Dept. of Mech. Engg., GIT, VSP	 Member
29	Prof. K.V. Ramesh, HoD,	 Member
30	Dept. of Electronics and Physics, GIS, VSP Prof. Anima S Dadhich, HoD, Dept. of Chemistry, GIS, VSP	 Member
31	Prof. N.Ravi Shankar, HoD, Dept. of Applied Mathematics, GIS, VSP	 Member
32	Prof. Ch. Surekha, HoD, Dept. of Biochemistry &	 Member
33	Bioinformatics, GIS, VSP Dr. B. Veerendra Kumar,	 Member
34	HoD, Dept. of Biotechnology, GIS, VSP Prof. K. Vedavathi, HoD,	 Member
35	Dept. of Comp. Science, GIS, VSP Prof. N. Srinivas, HoD,	 Member
36	Dept. of Env. Studies, GIS, VSP Prof. K.V.Chaitanya, HoD,	 Member
37	Dept. of Microbiology and FST, GIS, VSP Prof. K. Manjusree Naidu, HoD, Dept. of Entrepreneurship, GIM, VSP	 Member
38	Prof. M. Jyothsna, HoD, Dept. of Marketing, GIM, VSP	 Member
39	Prof. Ch. Venkataiah, HoD, Dept. of Operations, GIM, VSP	 Member
40	Prof. M.S.V. Prasad, HoD, Dept. of Finance, GIM, VSP	 Member
41	Dr.Radha Raghurampatruni, HoD, Dept. of International Business	 Member
42	Prof. K. Ashok, HoD, Dept. of HRM, GIM, VSP	 Member
43	Dr. N. Deepa Mohan, HoD, Dept. of Applied Psychology, GSGS, VSP	 Member
44	Dr. A. Sasikala, HoD,	 Member
45	Dept. of Humanities & Social Sciences, GSGS, VSP Prof. C. Pradgna, HoD, Dept. of English, GSGS, VSP	 Member
	Dept. of English, GSGS, VSP	

46	Prof. K. Manjunathachari, HoD, Dept. of EECE, SoT, HYD	 Member
47	Prof. A. Satya Devi, HoD, Dept. of Aerospace Engg., SoT, HYD	 Member
48	Prof. B. S. R. K. Prasad, HoD, Dept. of Civil Engg., SoT, HYD	 Member
49	Prof. S. Phani Kumar, Dept. of Comp. Sci. and Engg., SoT, HYD	 Member
50	Prof. P. Eshwaraiah, HoD, Dept. of Mechanical Engg., SoT, HYD	 Member
51	Prof. Y. Prabhavati, HoD, Dept. of English, SH&SS, HYD	 Member
52	Prof. G. Rambabu, HoD, Dept. of Chemistry, SoS, HYD	 Member
53	Prof. K. Maruthi Prasad, HoD, Dept. of Mathematics, SoS, HYD	 Member
54	Prof. R. Balaji Rao, HoD, Dept. of Physics, SoS, HYD	 Member
55	Prof. T. Nageswara Rao, HoD, Dept. of Mechanical Engg., SoT, BLR	 Member
56	Prof. T. N. Ruckmongathan, HoD, Dept. of EECE, SoT, BLR	 Member
57	Prof. S. H. Brahmananda, HoD , Dept. of CSE, SoT, BLR	 Member
58	Dr. Manju Jose, HoD, Dept. of English, SoT, BLR	 Member
59	Prof. R. Venkata Nadh, HoD, Dept. of Chemistry, SoS, BLR	 Member
60	Prof. N. V. Krishna Prasad, HoD, Dept. of Physics, SoS, BLR	 Member
61	Dr. B. Venkateswarlu, HoD, Dept. of Mathematics, SoS, BLR	 Member
62	Dr. A. Himabindu, HoD, Dept. of Anatomy, GIMSR, VSP	 Member
63	Dr. D. S. S. Girijavani, HoD, Dept. of Biochemistry, GIMSR, VSP	 Member
64	Dr. P. Hema Prakash Kumari, HoD, Dept. of Microbiology, GIMSR, VSP	 Member
65	Dr. Y. V. Harischandra, HoD, Dept. of Pediatrics, GIMSR, VSP	 Member
66	Dr. P. J. Sudhakar, Dept. of ENT, GIMSR, VSP	 Member
67	Dr. B. K. Durga Prasad, HoD, Dept. of Radio Diagnosis, GIMSR, VSP	 Member
68	Prof. T. Srinivas, Director, CDL	 Member

69	Prof. Ch. Rama Krishna, Director, UGC Affairs & Research Activities	 Member
70	Prof. B.S.N. Murthy, Director (I/c), Evaluation	 Member
71	Prof. S. S. Prasada Rao, Director, Center for Learning & Sustainability	 Member
72	Raja Phani P, Director, Research & Consultancy	 Member
73	Prof. Ch. Sumanth Kumar, Controller of Examinations	 Member
74	Dr. T.V. Ramana, Dept. of EECE, GIT, VSP	 Member
75	Dr. T. Uma Devi, Dept. of Computer Science, GIS, VSP	 Member
76	Dr. K.V.S. Seshendra Kumar, Dept. of Mechanical Engg., GIT, VSP	 Member
77	Dr. Ch. R. Phani Kumar, Dept. of EECE, GIT, VSP	 Member
78	Prof.B Yegnanarayana FNAE, FNA, FASc, FIEEE, FISCA, INSA Senior Scientist, International Institute of Information Technology, Gachibowli, Hyderabad-500032.	 Member
79	Dr. Harendra Kharakwal, Scientist E, Ministry of Environment, Forest and Climate Change (MoEFCC),Government of India,Vayu Wing, Indira Paryavaran Bhavan, New Delhi - 110 003.	 Member
80	Shri. Udaya Kumar Dintyala, Executive Director – ITO, AT&T Global Business Services India Pvt Ltd., Madhapur, Hyderabad – 500 081.	 Member
81	Dr. T. V. Suresh Kumar, Director, IQAC	 Spl. Invitee
82	Prof. Y. Radhika, Director, Academic Affairs	 Member
83	Prof. K.V.G.D. Balaji	 Ex-officio Secretary

Leave of absence is granted to

- 1. Dr. C. V. Rao, Pro Vice-Chancellor, Medical Sciences, GIMSR
- 2. Prof. Y. Gouthama Rao, Dean, Faculty of Management
- 3. Prof. C. Dharma Raj, Principal, GITAM Institute of Technology
- 4. Dr. G. Subbarao, HoD, Dept. of Physiology, GIMSR, VSP
- 5. Dr. B. Ramesh, HoD, Dept. of Pharmacology, GIMSR, VSP

- 6. Dr. G.Raja Prameela, HoD, Dept. of Pathology, GIMSR, VSP
- 7. Dr. T. V. Nagaraja, HoD, Dept. of Forensic Medicine, GIMSR, VSP
- 8. Dr. Nagamani, HoD, Dept. of Community Medicine, GIMSR, VSP
- 9. Dr. M.S.N. Murthy, HoD, Dept. of General Medicine, GIMSR, VSP
- 10. Dr. D. Nikhila, Dept. of Respiratory Medicine, GIMSR, VSP
- 11. Dr. Farzana, Dept. of Dermatology, GIMSR, VSP
- 12. Dr. N. Sri Krishna, Dept. of Psychiatry, GIMSR, VSP
- 13. Dr. Mohan Patro, HoD, Dept. of General surgery, GIMSR, VSP
- 14. Dr. G. Rajasekhararao, HoD, Dept. of Orthopedics, GIMSR, VSP
- 15. Dr. P .Veena, HoD(I/c), Dept. of Ophthalmology, GIMSR, VSP
- 16. Dr. N.Dwarakanath, Medical Superintendent, GIMSR, VSP
- 17. Dr. D. Vijayakumar Rao, HoD, Dept. of Anesthesiology, GIMSR, VSP
- 18. Dr. T. Radha, HoD, Dept. of Obstetrics and Gynaecology, GIMSR, VSP
- 19. Prof. K. Veera Bhadram, Director, Directorate of Student Affairs
- 20. Prof. Sukumar Mishra, Department of Electrical Engineering, Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110 016;
- 21. Prof. Dr. B. Srinivas, Assistant Director General (ME), Ministry of Health & Family Welfare (MH&FW), Nirman Bhavan, New Delhi 110 01.
- 22. Dr. Bhoop Singh, Head – NRDMS & NSDI Division, Department of Science & Technology (DST), Technology Bhawan, New Mehrauli Road, New Delhi - 110 016.
- 23. Mr. Sekhar P.A.V.S, Director, Admissions

At the outset, the Chairman has extended a warm welcome to all members of the Academic Council and introduced the external experts and special invitees to the members of the Council.

The chairman, 18<sup>th</sup> Academic council has informed the members of the council about constitution of committee to study the guidelines specified in the National educational policy.

### MINUTES OF THE MEETING

**ITEM-1:** Confirmation of the Minutes of the 17<sup>th</sup> meeting of the Academic Council held on 23-11-2019

The Minutes of the 17<sup>th</sup> meeting of the Academic Council held on 23-11-2020 are confirmed.

ITEM-2: Action Taken Report on the resolutions of the 17<sup>th</sup> meeting of the Academic Council held on 23-11-2019

The Action Taken Report on the resolutions of the 17<sup>th</sup> meeting of the Academic Council is noted by the Members.

### FACULTY OF ENGINEERING

### ITEM-3: Minor modifications in Curriculum of B. Tech. Aerospace Engineering

**Prof. A. Satyadevi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the modified curriculum and syllabus of B.Tech. Aerospace Engineering programme effective from 2019-20 admitted batch as recommended by the BoS in Aerospace Engineering be approved.

The motion was put to the meeting and declared *Carried*.

ITEM-4: Approval of scheme and syllabi of B.Tech. Biotechnology with specialized subjects in Artificial Intelligence & Machine Learning

**Prof. Sk. Khasim Beebi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabi of B.Tech. Biotechnology with specialized subjects in Artificial Intelligence and Machine Learning, as recommended by the BoS in Biotechnology be approved.

The motion was put to the meeting and declared Carried.

### ITEM-5: Minor modifications in the eligibility criteria for the admission into Ph.D. in Biotechnology - Faculty of Engineering

**Prof. Sk. Khasim Beebi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor modifications in the eligibility criteria for the admission into Ph.D. in Biotechnology - Faculty of Engineering, from the academic year 2020-21 as recommended by the BoS in Biotechnology be approved.

# ITEM-6: Approval of Syllabus for Ph.D. course work by Department of Biotechnology - Faculty of Engineering

**Prof. Sk. Khasim Beebi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the syllabus for the Ph.D. course work by Department of Biotechnology - Faculty of Engineering, from the academic year 2019-20 as recommended by the BoS in Biotechnology be approved.

The motion was put to the meeting and declared *Carried*.

## ITEM-7: Approval of "Modifications in Scheme", Course Outcomes, Course Objectives in curriculum of B.Tech. Biotechnology programme

**Prof. Sk. Khasim Beebi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the "modifications in scheme", course outcomes and course objectives in the curriculum of B.Tech. Biotechnology programme, effective from 2019-20 admitted batch as recommended by the BoS in Biotechnology be approved.

The motion was put to the meeting and declared Carried.

### ITEM-8: Minor Modifications in Course curriculum of B.Tech. Civil Engineering Programme w.e.f. 2019-2020 admitted batch

**Prof.K.V.Ramesh:** Respected Vice-chancellor and Members of the Academic Council, please permit me to move that the minor modifications in course curriculum of B.Tech. Civil Engineering effective from 2019-20 admitted batch as recommended by the BoS in Civil Engineering be approved.

**Suggestion by Shri. Udaya Kumar Dintyala:** Include tools/packages in civil engineering syllabus which are used by the industry.

The motion was put to the meeting and declared *Carried*.

### **ITEM-9:** Introduction of New Scheme B.Tech Civil Engineering with specialized subjects in Artificial Intelligence and Machine Learning

**Prof. K.V.Ramesh:** Respected Vice–Chancellor and Members of the Academic Council, please permit me to move that the new scheme and syllabi under Choice Based Credit System for B.Tech. "Civil engineering with specialized subjects in Artificial Intelligence and Machine Learning", as recommended by the BoS in Civil Engineering be approved.

**Suggestion by Shri. Udaya Kumar Dintyala:** Include tools/packages in civil engineering syllabus which are used by the industry.

### **ITEM-10: Introduction of New Programme - M.Tech in Computer Aided Structural** Engineering offered at SoT, Hyderabad campus

**Prof. K.V.Ramesh:** Respected Vice–Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabi under Choice Based Credit System for M.Tech in "Computer Aided Structural Engineering", effective from 2020-21 admitted batch as recommended by the BoS in Civil Engineering be approved

**Suggestion by Shri. Udaya Kumar Dintyala:** Include tools/packages in civil engineering syllabus which are used by the industry.

Suggestion by Prof. N. Siva Prasad: Change title as English for technical report writing .

The motion was put to the meeting and declared *Carried*.

# ITEM-11: Modifications in the Curriculum of B.Tech. Computer Science and Engineering Programme w.e.f. 2019-20AB and Approval of the Syllabi of 3<sup>rd</sup> and 4<sup>th</sup> semester of B. Tech.(CSE)

**Prof. K. Thammi Reddy:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the Minor modification in the curriculum of B.Tech. Computer Science and Engineering Programme and approval of the syllabi of 3<sup>rd</sup> and 4<sup>th</sup> semesters, w.e.f. 2019-20AB as recommended by BoS in Computer Science and Engineering be approved.

**Suggestion by Shri. Udaya Kumar Dintyala:** Collaborate with industry for orientation of syllabus towards industry requirements.

The motion was put to the meeting and declared *Carried*.

# ITEM–12: Modifications in the Curriculum of B.Tech. Computer Science and Business Systems Programme and Approval of the Syllabi of 3<sup>rd</sup> and 4<sup>th</sup> semester of B. Tech.(CSBS)

**Prof. K. Thammi Reddy:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor modification in the curriculum of B.Tech. Computer Science and Business Systems Programme and approval of the Syllabi of 3<sup>rd</sup> and 4<sup>th</sup> semesters, w.e.f. 2019-20AB as recommended by BoS in Computer Science and Engineering be approved.

# ITEM-13: Introduction of New Programmes - B.Tech – Computer Science and Engineering with specialization in Artificial Intelligence and Machine Learning/Data Science/Cyber Security/Internet of Things

**Prof. K. Thammi Reddy:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabi under Choice Based Credit System for the proposed UG programme B.Tech- "Computer Science and Engineering with specialization in Artificial Intelligence and Machine Learning/Data Science/Cyber Security/Internet of Things" effective from 2020-21 admitted batch as recommended by BoS in Computer Science and Engineering be approved.

The motion was put to the meeting and declared *Carried*.

ITEM-14: Change of Title for the PG program of M.Tech. (Computer Science and Technology) to M.Tech. (Computer Science and Engineering) and Minor modifications in the Curriculum of M.Tech.( Computer Science and Engineering /Data Science /Cyber Forensics and Information Security)

**Prof. K. Thammi Reddy:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the Change of title from M.Tech. (Computer Science and Technology) to M.Tech. (Computer Science and Engineering) and Minor modification in the curriculum of M.Tech.(Computer Science and Engineering /Data Science /Cyber Forensics and Information Security) effective from 2020-21 academic year as recommended by BoS in Computer Science and Engineering be approved.

The motion was put to the meeting and declared Carried.

### ITEM–15: Approval of Course Outcomes and Program Outcomes of B.Tech. (CSE) program

**Prof. K. Thammi Reddy:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the Course Outcomes and Program Outcomes of B.Tech. (CSE) program as recommended by BoS in Computer Science and Engineering be approved.

The motion was put to the meeting and declared Carried.

ITEM-16: Introduction of B.Tech. ECE scheme with specialized subjects in Artificial Intelligence and Machine Learning, Internet of Things, Medical Electronics and VLSI Design.

**Prof. P.V.Y. Jayasree:** Respected Vice-chancellor and Members of the Academic Council, please permit me to move that the proposed Scheme and syllabi under Choice Based Credit System with specialized subjects in B.Tech ECE as recommended by the BoS

in Electrical, Electronics and Communication Engineering be approved.

**Suggestion by Prof. N. Siva Prasad:** (1) Title of the course "Design Thinking and Product Innovation" should be changed as "Design Thinking". This is applicable to all the branches of Engineering.

(2) Credits of English course should be changed.

# ITEM-17: Introduction of B.Tech. EEE Scheme with specialized subjects in Robotics & Automation.

**Prof. P.V.Y. Jayasree:** Respected Vice-chancellor and Members of the Academic Council, please permit me to move that the Scheme and syllabi under Choice Based Credit System for the proposed B.Tech EEE scheme specialized subjects in Robotics and Automation as recommended by the BoS in Electrical, Electronics and Communication Engineering be approved.

The motion was put to the meeting and declared Carried.

# ITEM-18: Introduction of New PG Programme- M.Tech - BioMedical Signal Processing and Instrumentation

**Prof.P.V.Y. Jayasree:** Respected Vice-chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabi under Choice Based Credit System for the proposed M.Tech "Bio Medical Signal Processing and Instrumentation" effective from 2020-21 admitted batch as recommended by the BoS in Electrical, Electronics and Communication Engineering be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-19: Inclusion of new courses in Ph.D course work of EEE research students of EECE department.

**Prof. P.V.Y. Jayasree:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion of courses in Ph.D course work for EEE research scholars admitted in the Department of Electrical, Electronics and Communication Engineering, effective from 2020-21 admitted batch as recommended by BoS in Electrical, Electronics and Communication Engineering be approved.

## ITEM-20: Approval of Detailed syllabus with preamble, course objectives, learning outcomes and course outcomes of B.Tech ECE and B.Tech EEE Programmes.

**Prof. P.V.Y. Jayasree:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the detailed syllabi including course preamble, course objectives, learning outcomes, course outcomes of all courses in B.Tech ECE and B.Tech EEE w.e.f. 2019-20 admitted batch in the Department of Electrical, Electronics and Communication Engineering, as recommended by BoS in Electrical, Electronics and Communication Engineering be approved.

The motion was put to the meeting and declared *Carried*.

ITEM-21: Minor Changes in scheme of B.Tech. Electronics and Communication Engineering Programme effective from 2019-20 admitted batch

**Prof. P.V.Y. Jayasree:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move the changes in the scheme of BTech ECE Programme to promote skill development, entrepreneurship culture, specialization choice etc., effective from 2019-20 admitted batch as recommended by BoS in Electrical, Electronics and Communication Engineering be approved

The motion was put to the meeting and declared *Carried*.

ITEM-22: Minor Changes in courses of B.Tech. Electrical and Electronics Engineering programme effective from 2019-20 admitted batch.

**Prof. P.V.Y. Jayasree:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move the changes in the scheme of B.Tech EEE Programme, to promote skill development, entrepreneurship culture, specialization choice etc., effective from 2019-20 admitted batch as recommended by BoS in Electrical, Electronics and Communication Engineering be approved

The motion was put to the meeting and declared *Carried*.

# ITEM-23: Inclusion of additional Audit Course in M.Tech Power Systems and Automation programme

**Prof. P.V.Y. Jayasree:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion of additional Audit Course 19EAC747 – Stress Management by Yoga (offered for M.Tech VLSI Design w.e.f. 2019-20AB) to be offered for M.Tech Power Systems and Automation Programme w.e.f. 2020-21 admitted batch as recommended by BoS in Electrical, Electronics and Communication

Engineering be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-24: Introduction of modified scheme with specialized courses in B.Tech Mechanical Engineering

**Prof. M.R.S. Satyanarayana:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the scheme, structure and syllabi under Choice Based Credit System of BTech Mechnical Engineering with specialized subjects as recommended by BoS in Mechanical Engineering be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-25: Introduction of new PG programmes in Mechanical Engineering

**Prof. M.R.S. Satyanarayana:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the regulations, structure and syllabi under Choice Based Credit System for the PG programmes, effective from 2020-21 admitted batch as recommended by BoS in Mechanical Engineering be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-26: Approval of Course Outcomes and Program Outcomes of B.Tech. Mechanical Engineering program

**Prof. M.R.S. Satyanarayana:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the Course Outcomes and Program Outcomes of B.Tech. (Mechanical Engineering) program as recommended by BoS in Mechanical Engineering be approved.

The motion was put to the meeting and declared *Carried*.

**Suggestions by Prof. B. Yegnanarayana:** (1) General suggestion to all the engineering branches; instead of offering Artificial Intelligence and Machine Learning (AIML) as specialized courses in their respective branches, it is suggested to offer a generalized course with uniform syllabus which is made mandatory for all branches of engineering, similar to "basics of computer applications" which was made mandatory for all the engineering branches earlier.

(2) Do not train the students only for the purpose of industry; the whole idea is not skill development, rather enhance a student's conceptual and intellectual skills.

(3) Project GITAM as one which has uniqueness in a particular area similar to other world class universities.

**Prof. N. Siva Prasad, Pro Vice-Chancellor, Hyderabad campus:** Explained the members about the reasons for offering AIML as a specialized course instead of a generalized course. Motive is to retain the core area and apply AIML techniques to various applications of respective branches. In the coming years, it is proposed to introduce AIML as a generalized course to all the branches.

**Chairman, 18<sup>th</sup> Academic council:** (1) GITAM is travelling in the path of establishing its uniqueness and is hopeful of attaing the same in the near future.

(2) GITAM has introduced "Learning to learn" course for a few disciplines and are planning to extend the same to all the disciplines which would enable students to learn continuously.

### FACULTY OF SCIENCE

### **ITEM-27:** Inclusion of new courses in Ph.D. course work for the research Scholars admitted in the Department of Mathematics

**Prof. N. Ravi Sankar:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion new courses SAM 906 : Number theory & Cryptography and SAM 907 : Relativity and Cosmology in Ph.D. course work for the research scholars admitted in the Department of Mathematics, effective from 2020-21 admitted batch as recommended by the BoS in Mathematics be approved.

The motion was put to the meeting and declared *Carried*.

### **ITEM-28:** Inclusion of Mathematics and Statistics courses in B.Tech Programs of III and IV semesters

**Prof. N. Ravi Sankar:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion of Mathematics and Statistics courses in the B.Tech. programs of III and IV semesters for the admitted batches of 2019-20 and 2020-21 respectively as recommended by the BoS in Mathematics be approved.

The motion was put to the meeting and declared *Carried*.

### **ITEM-29:** Minor changes in the curriculum of B.Sc. programme offered by Department of Biochemistry and Bioinformatics.

**Prof. Ch. Surekha:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor change in the curriculum of B.Sc. programme offered by Department of Biochemistry and Bioinformatics, effective from 2020-21 academic year as recommended by the BoS in Biochemistry and Bioinformatics be approved.

The motion was put to the meeting and declared *Carried*.

### **ITEM-30:** Approval of regulations, course structure and syllabus of the new B.Sc. (Hons.) programme in the Department of Biotechnology

**Dr. B. Veerendra Kumar:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the introduction of academic regulations and syllabus of the new B.Sc. (Hons.) Biotechnology programme, effective from 2020-21 admitted batch as recommended by the BoS in Biotechnology be approved.

The motion was put to the meeting and declared Carried.

### ITEM-31: Revised regulation in Integrated M.Sc. Biotechnology

**Dr. B. Veerendra Kumar:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the revised regulation in Integrated M.Sc. Biotechnology, effective from 2020-21 admitted batch as recommended by the BoS in Biotechnology be approved.

The motion was put to the meeting and declared Carried.

# ITEM-32: Introduction of minor project in B.Sc. (Biotechnology, Chemistry and Microbioloy) Programme

**Dr. B. Veerendra Kumar**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the introduction of minor project in B.Sc. (Biotechnology, Chemistry and Microbioloy) programme, effective from 2020-21 admitted batch as recommended by the BoS in Biotechnology be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-33: Minor revision in M.Sc. Analytical/Organic chemistry programme

**Prof. Anima Sunil Dadhich:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor revisions in M.Sc. Analytical/Organic Chemistry programme, effective from 2020-21 admitted batch as recommended by the BoS in Chemistry be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-34: Minor revision in B.Sc. (Hons.) Chemistry Programme

**Prof. Anima Sunil Dadhich:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor revision in B.Sc. (Hons.) Chemistry programme, effective from 2020-21 admitted batch as recommended by the BoS in Chemistry be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-35: Curriculum change in the course of M.C.A (2 year ) Programme

**Prof. K. Vedavathi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to introduce new scheme of instruction and syllabus for MCA two year

program, as per the approval process hand book 2020-21 of AICTE, effective from 2020-21 admitted batch as recommended by the BoS in Computer Science be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-36: Minor changes in the courses of M.Sc. Data Science Programme

**Prof. K. Vedavathi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor changes in the courses of M.Sc. Data Science programme, effective from 2020-21 admitted batch as recommended by the BoS in Computer Science be approved.

**Suggestion by Prof. N. Siva Prasad:** (1) Change the title for the course SSE 709 "MATLAB" to "Computational methods"(2) It should be a lab course.

The motion was put to the meeting and declared *Carried*.

# ITEM-37: Minor change in the syllabus of SCA 857 : Machine Learning in MCA Programme for 2018-19 admitted batch.

**Prof. K. Vedavathi:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that a minor change in the syllabus of SCA 857 Machine Learning Course of MCA, effective from 2018-19 admitted batch, as recommended by the BoS in Computer Science be approved.

The motion was put to the meeting and declared Carried.

# **ITEM-38:** Minor changes in the curriculum of B.Sc. programme offered by department of Environmental Science.

**Prof. N. Srinivas:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor change in the curriculum of B.Sc. programme offered by department of Environmental Science, effective from 2020-21 academic year as recommended by the BoS in Environmental Science be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-39: Introduction of Minors in PG programs offered by department of Environmental Science.

Prof. N. Srinivas: Respected Vice-Chancellor and Members of the Academic Council,

please permit me to move that the minors in PG programs offered by department of Environmental Science, to the students other than the Department of Environmental Science effective from 2020-21 admitted batch as recommended by the BoS in Environmental Science be approved.

Suggestion by Dr. Harendra Kharakwal: Verify in the UGC Nomenclature.

Suggestion by Chairman, 18<sup>th</sup> Academic council: Verify in the UGC Nomenclaute, if permits we can offer the programme otherwise the same can be offered as a Certificate/Diploma programme by charging some amount.

The motion was put to the meeting and after due deliberations the Council *resolved to authorize Vice-Chancellor* to take further necessary action.

ITEM-40: Addition of activities in the syllabus of Environmental Science (Under Ability Enhancement Compulsory Courses (AECC)) offered by department of Environmental Science.

**Prof. N. Srinivas:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the changes in syllabus of Environmental Science (AECC) with complete assessment under Continuous Evaluation for a maximum of 100 marks, common for all under graduate Science programmes offered by all three campuses of GITAM (Deemed to be University), effective from 2020-21 admitted batch as recommended by the BoS in Environmental Science be approved.

The motion was put to the meeting and declared *Carried*.

**ITEM-41:** Change in the nomenclature of M.Sc. Electronic Science programme as M.Sc Electronics offered by department of Electronics and Physics.

**Prof. K.V. Ramesh:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the change in the name of the M.Sc. program along with revision of the curriculum and syllabus offered by department of Electronics and Physics, effective from 2020-21 academic year as recommended by the BoS in Electronics and Physics be approved.

The motion was put to the meeting and declared Carried.

ITEM-42: Minor changes in the curriculum of B.Sc. programmes offered by department of Electronics and Physics.

**Prof. K.V. Ramesh:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor change in the curriculum of B.Sc. programs

offered by department of Electronics and Physics, effective from 2020-21 academic year as recommended by the BoS in Electronics and Physics be approved.

The motion was put to the meeting and declared *Carried*.

# **ITEM-43:** Introduction of Minors in PG programs offered by department of Electronics and Physics.

**Prof. K.V. Ramesh:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minors in PG programs offered by department of Electronics and Physics, to the students other than the Department of Electronics and Physics effective from 2020-21 admitted batch as recommended by the BoS in Electronics and Physics be approved.

Suggestion by Prof. N. Siva Prasad: The title of the course "Computational Methods in Physics using Python" should be changed as "Computational Methods in Physics".

Suggestion by Chairman, 18<sup>th</sup> Academic council: Verify in the UGC Nomenclaute, if permits we can offer the programme otherwise the same can be offered as a Certificate/Diploma programme by charging some amount.

The motion was put to the meeting and after due deliberations the Council *resolved to authorize Vice-Chancellor* to take further necessary action.

# ITEM-44: Inclusion of courses in Ph.D. course work for the research Scholars admitted in the Department of Electronics and Physics.

**Prof. K.V. Ramesh:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion of courses in Ph.D. course work for the research scholars admitted in the Department of Electronics and Physics, effective from 2020-21 admitted batch, as recommended by the BoS in Electronics and Physics be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-45: Addition of new courses in the list of Departmental Electives of M.Sc. Physics Programme

**Prof. K.V. Ramesh:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the addition of new courses in the list of Departmental Electives in III semester of 2<sup>nd</sup> year M.Sc. Physics Programme, effective from 2019-20 admitted batch, as recommended by the BoS in Electronics and Physics be approved.

### **ITEM-46:** The change of Department name from "Department of Electronics and Physics" to "Department of Physics" at Institute of Science, Visakhapatnam Campus

**Prof. K.V. Ramesh:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the change of name from "Department of Electronics and Physics" to "Department of Physics" at Institute of Science, Visakhapatnam campus, as recommended by the BoS in Electronics and Physics be approved.

The motion was put to the meeting and declared Carried.

### ITEM-47: Introduction of new UG Programme B.Sc. (Hons.) Microbiology

**Prof. K.V.Chaitanya**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabi of proposed new UG programme B.Sc. (Hons.) Microbiology, effective from 2020-21 admitted batch as recommended by the BoS in Microbiology and FST be approved.

The motion was put to the meeting and declared Carried.

# ITEM-48: Minor changes in the courses of B.Sc. (Hons.) Food Technology Programme

**Prof. K.V.Chaitanya**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor changes in the courses of B.Sc. (Hons.) Food Technology Programme, effective from 2020-21 admitted batch as recommended by the BoS in Microbiology and FST be approved.

The motion was put to the meeting and declared Carried.

# ITEM-49: Minor changes in the courses of M.Sc. Food Science and Technology Programme

**Prof. K.V.Chaitanya**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor changes in the courses of M.Sc. Food Science and Technology Programme, effective from 2020-21 admitted batch as recommended by the BoS in Microbiology and FST be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-50: Inclusion of M.Tech. Food Technology in the eligibility list for Ph.D Programme in Food Science and Technology.

**Prof. K.V.Chaitanya**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion of M.Tech. Food Technology in the eligibility list for Ph.D Programme in Food Science and Technology, effective from 2020-21

admitted batch as recommended by the BoS in Microbiology and FST be approved.

### FACULTY OF MANAGEMENT

### **ITEM-51: Introduction of New PG Programmes at Institute of Management**

**Prof. D. Shailendra:** Respected Vice Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabai under Choice Based Credit System for the new PG Programmes at GIM with effect from 2020-21 admitted batch as recommended by the Joint BOS in Management be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-52: Introduction of New UG Programmes at Institute of Management

**Prof. D. Shailendra:** Respected Vice Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabai under Choice Based Credit System for the new UG Programmes at GIM with effect from 2020-21 admitted batch as recommended by the Joint BOS in Management be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-53: Conversion of the following PG Programmes from Trimester to Semester Programme

**Prof. D. Shailendra:** Respected Vice Chancellor and Members of the Academic Council, please permit me to move that the conversion of trimester to semester for the PG Programmes under Choice Based Credit System with effect from 2020-21 admitted batch as recommended by the Joint BOS in Management be approved.

Note: The above resolution is applicable to all the three campuses of GITAM.

The motion was put to the meeting and declared *Carried*.

### ITEM-54: Revision of Curriculum of BBA (Business Analytics) Programme

**Prof. D. Shailendra:** Respected Vice Chancellor and Members of the Academic Council, please permit to me move that the revised curriculum under Choice Based Credit System with effect from 2020-21 admitted batch as recommended by the Joint BOS in Management be approved.

### ITEM-55: Revision of syllabus in the following UG Courses

**Prof. D. Shailendra:** Respected Vice Chancellor and Members of the Academic Council, please permit me to move that the minor revision in the courses under Choice Based Credit System with effect from 2019-20 & 2020-21 admitted batches as recommended by the Joint BOS in Management be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-56: Introduction of New UG Programmes at Hyderabad Business School

**Prof. D. Shailendra:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the regulations and syllabi for the undergraduate programmes, effective from 2020-21 batch as recommended by the by the Joint BOS in Management be approved.

### FACULTY OF ARCHITECTURE

#### ITEM-57: Minor changes in the courses of B.Arch. Programme

**Prof. K. Mohan**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor changes in the courses of B.Arch. Programme, effective from 2017-18 admitted batch as recommended by the BoS in Architecture be approved.

# FACULTY OF HUMANITIES & SOCIAL SCIENCES

# ITEM-58: Introduction of new course "Venture Discovery" in M.A. Applied Psychology programme

**Dr. N. Deepa Mohan:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the introduction of a new compulsory foundation skill building course "Venture Discovery" for 50 marks (only Continuous Assessment) in First semester of 1st year in M.A. Applied Psychology programme at GITAM School of Gandhian Studies in association with Venture development centre, GITAM, effective from 2020-21 admitted batch as recommended by the BoS in Applied Psychology be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-59: Revised Curriculum BA Social Science program at GITAM School of Gandhian Studies

**Dr. A.S. Sasikala**: Respected Vice Chancellor and members of the Academic Council, please permit me to move that the revised curriculum of BA Social Science program at GITAM School of Gandhian Studies, effective from 2020-21 admitted batch as recommended by the BoS in Humanities and Social Sciences be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-60: Minor changes in the structure of BA Programmes at GITAM School of Humanities and Social Sciences, Hyderabad Campus.

**Dr. A.S. Sasikala**: Respected Vice Chancellor and members of the Academic Council, please permit me to move that the minor changes in the structure of BA Programmes at GITAM School of Humanities and Social Sciences, Hyderabad campus effective from 2020-21 admitted batch as recommended by the BoS in Humanities and Social Sciences be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-61: Introduction of New Programmes at GITAM School of Humanities and Social Sciences, Hyderabad Campus

Dr. A.S. Sasikala: Respected Vice Chancellor and Members of the Academic Council,

please permit me to move that the regulations and syllabi of the new proposed programmes at GITAM School of Humanities and Social Sciences, Hyderabad Campus as recommended by the BoS in HSS be approved.

The motion was put to the meeting and declared *Carried*.

# **ITEM-62:** Introduction of New Programme MA Economics at GITAM School of Gandhian Studies, Visakhapatnam Campus

**Dr. A.S. Sasikala**: Respected Vice Chancellor and the Members of the Academic Council, please permit me to move that the regulations and syllabus of the proposed new MA Economics programme, as recommended by the BoS in HSS be approved.

The motion was put to the meeting and declared Carried.

### ITEM-63: Inclusion of Venture Discovery course in B.A. Social Science program.

**Dr. A.S. Sasikala**: Respected Vice Chancellor and the Members of the Academic Council, please permit me to move that the inclusion of Venture Discovery course in I semester of 1<sup>st</sup> year B.A. Social Science program, effective from 2020-21 admitted batch, as recommended by the BoS in Humanities and Social Sciences be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-64: Introduction of GEL131: Communicative English for all undergraduate programmes (BTech/BBA/IMBA/BCom/BSc)

**Prof C Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the syllabus of the proposed GEL131: Communicative English for all undergraduate programmes (Semester-I BTech/BBA/IMBA/BCom/BSc) in all three campuses, effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-65: Introduction of new open elective courses for all the Branches of B.Tech. programme.

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the introduction of open elective courses for all the branches of B.Tech. programme, effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

# ITEM-66: Revision of the syllabus of MBG108: Special English for Management undergraduate programmes (Semester-II of BBA/BCom/IMBA).

**Prof C Pradgna**: Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the revised syllabus of MBG108: Special English for Management undergraduate programmes (Semester- II of BBA/BCom/IMBA), effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-67: Introduction of VDC111-Venture Discovery (Skill Building Course) for 2 credits in semester I of M.A. English Language and Literature offered in GITAM School of Gandhian Studies at Visakhapatnam campus

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the introduction of VDC111-Venture Discovery (Skill Building Course) for 2 credits in semester I of M.A. English Language and Literature offered in GITAM School of Gandhian Studies at Visakhapatnam campus, effective from 2020-21 academic year as recommended by the BoS in English be approved.

The motion was put to the meeting and declared Carried.

# ITEM-68: Minor Revisions in the courses of M.A. English Language and Literature offered in GITAM School of Gandhian Studies at Visakhapatnam campus

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor revisions in the courses of M.A. English Language and Literature offered in GITAM School of Gandhian Studies at Visakhapatnam campus, effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

The motion was put to the meeting and declared Carried.

### ITEM-69: Change of course code from GAP 709: Soft Skills to GEL 753: Soft Skills for M.A Psychology & Economics programme offered at GITAM School of Gandhian Studies, Visakhapatnam Campus

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the change in the course of GAP 709: Soft Skills offered in GITAM School of Gandhian Studies at Visakhapatnam campus, effective from 2020-21 academic batch as recommended by the BoS in English be approved.

The motion was put to the meeting and declared Carried.

# ITEM-70: Introduction of new core and elective courses for Bachelor of Arts (BA) programme offered at GITAM School of Humanities and Social Sciences, Hyderabad Campus

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the introduction of the new core and elective courses in B.A. programme offered at GITAM School of Humanities and Social Sciences, Hyderabad campus, effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

The motion was put to the meeting and declared Carried.

# ITEM-71: Minor Revisions in the courses of English in B.A. Programme offered in GITAM School of Humanities and Social Sciences at Hyderabad campus

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor revisions in the courses of English in B.A. programme offered in GITAM School of Humanities and Social Sciences at Hyderabad campus, effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-72: Minor Revisions in the courses of M.A. (English) offered in GITAM School of Humanities and Social Sciences at Hyderabad campus

**Prof. C. Pradgna:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor revisions in the courses of M.A. (English) offered in GITAM School of Humanities and Social Sciences at Hyderabad campus, effective from 2020-21 admitted batch as recommended by the BoS in English be approved.

### FACULTY OF MEDICAL SCIENCES

## ITEM-73: Revision of curriculum, syllabus and Model question papers in I MBBS at GIMSR

**Dr. I. Jyothi Padmaja:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the revised curriculum, syllabus and model question papers I & II in the departments of GIMSR, GITAM introduced for the I MBBS, effective from 2019-2020 admitted batch as recommended by the Medical Council of India and BoS in I MBBS be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-74: Implementation of new revised CBME syllabus for phase II MBBS Students

**Dr. I. Jyothi Padmaja:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the revised CBME syllabus of phase II MBBS students, effective from 2020-21 academic year as recommended by the Medical Council of India and BoS in phase II MBBS be approved.

The motion was put to the meeting and declared *Carried*.

### **ITEM-75:** New question paper format for phase II MBBS students

**Dr. I. Jyothi Padmaja:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the new question paper format for phase II MBBS students, effective from 2019-20 admitted batch as recommended by the BoS in phase II MBBS be approved.

### TABLE ITEMS

# **ITEM-76:** Revised assessment procedure for continuous evaluation part in theory and lab courses for the students of Faculty of Engineering

**Prof. Vijaysekhar Chellaboina:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the revised assessment procedure for continuous evaluation part in theory and practical courses, for the students of Faculty of Engineering, applicable for odd semester of the 2020-21 academic year as recommended by the Dean, Engineering be approved.

The motion was put to the meeting and declared *Carried*.

# ITEM-77: Revised syllabus of 19EOE319: Introduction to Music, an Open Elective course for the B.Tech. students of Faculty of Engineering

**Prof. N. Siva Prasad:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the revised syllabus of 19EOE319: Introduction to Music, an Open Elective course for the B.Tech. students of Faculty of Engineering, effective from 2020-21 academic year as recommended by the Director, GITAM School of Humanities and Social Sciences, Hyderabad campus be approved.

The motion was put to the meeting and declared *Carried*.

### ITEM-78: Minors in PG programs offered by department of Biotechnology

**Prof. B. Veerendra Kumar:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the Scheme and syllabi of Molecular Diagnostics minor as recommended by the BoS in Biotechnology, effective from the academic year 2020-21 be approved.

Suggestion by Chairman, 18<sup>th</sup> Academic council: Verify in the UGC Nomenclaute, if permits we can offer the programme otherwise the same can be offered as a Certificate/ Diploma programme by charging some amount.

The motion was put to the meeting and after due deliberations the Council *resolved to authorize Vice-Chancellor* to take further necessary action.

# ITEM-79: Minors in PG programs offered by Department of Biochemistry and Bioinformatics

**Prof. Ch.Surekha:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the minor in PG programs offered by Department of Biochemistry and Bioinformatics, to the students other than the Department of Biochemistry and Bioinformatics effective from 2020-21 admitted batch as recommended by the BoS in Biochemistry and Bioinformatics be approved.

Suggestion by Chairman, 18<sup>th</sup> Academic council: Verify in the UGC Nomenclaute, if permits we can offer the programme otherwise the same can be offered as a Certificate/ Diploma programme by charging some amount.

The motion was put to the meeting and after due deliberations the Council *resolved to authorize Vice-Chancellor* to take further necessary action.

# **ITEM-80:** Minors in PG programs offered by Department of M.Sc. Microbiology and Food Science & Technology

**Prof. K.V. Chaitanya:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move to introduce minor in PG programs offered by Department of M.Sc. Microbiology and Food Science & Technology, as recommended by the BoS in Microbiology and Food Science & Technology, effective from the academic year 2020-21 be approved.

Suggestion by Chairman, 18<sup>th</sup> Academic council: Verify in the UGC Nomenclaute, if permits we can offer the programme otherwise the same can be offered as a Certificate/ Diploma programme by charging some amount.

The motion was put to the meeting and after due deliberations the Council *resolved to authorize Vice-Chancellor* to take further necessary action.

# **ITEM-81: Introduction of new UG programmes at GITAM School of Humanities and Social Sciences, Hyderabad campus**

**Prof. V.V.V. Nagendra Rao:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the Introduction of new UG programmes at GITAM School of Humanities and Social Sciences, effective from the 2020-21 academic year as recommended by the Director, GITAM School of Humanities and Social Sciences be approved.

The motion was put to the meeting and in principle declared *Carried*, subject to the condition that the circulation of programme syllabus to the members of the council. In view of the above, after due deliberations the Council *resolved to authorize Vice*-

*Chancellor* to take further necessary action.

#### ITEM-82: Introduction of new courses in Law programmes as per BCI guidelines.

**Prof. R. Anita Rao:** Respected Vice-Chancellor and Members of the Academic Council, please permit me to move that the inclusion of two new courses in the Law programmes, effective from the admitted batch of 2020-21, as recommended by BoS in Law be approved

The motion was put to the meeting and in principle declared *Carried*, subject to the condition that the circulation of programme syllabus to the members of the council. In view of the above, after due deliberations the Council *resolved to authorize Vice-Chancellor* to take further necessary action.

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CHAIRMAN

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#### DEPARTMENT OF MECHANICAL ENGINEERING GIT, GITAM

From	Principal Office GITAM Institute of Technology	Date: 13/03/2019
Head of the Departme	ent	
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To The Principal GIT GITAM	Gandhi Institute of Technology and Management (GITAM) (Deemed to be Unit desity) Visakhapatoam	Phivaedel to the Registers Ce Dientre 10AL Dilecte RAC
Sir,		PRINCIPAL GITAM Institute of Technology Gandhidastitute of Technology and Management (GITAM (Deemed to be University) Visakhapatnam-530 045

Sub: Request for approval to change the name of the M.Tech Programme from machine Design to Machine Design & Robotics – Reg.

This is to bring to our kind notice that, the Department of Mechanical Engineering proposed M.Tech (Machine Design) program during the academic year 2020-21. In the present global research and industrial applications, it is necessary to change the M.Tech program name as **Machine Design** to **Machine Design & Robotics**.

In this connection, Department Committee has proposed change the name of the M.Tech Program as M.Tech (Machine Design) to M.Tech (Machine Design & Robotics) for the benefit of M.Tech students and Institute.

Hence, we request you to approve for changing the name of the M.Tech program M.Tech (Machine Design) to M.Tech (Machine Design & Robotics). This is for your kind information and necessary action.

Thanking you,

(Prof. M R S Satyanarayana) Head of the Department Department of Mechanical Engineering GITAM Institute of Technology andhi Institute of Technology and Management (GITAM) (Deemed to be University) Visakhapatnam-530.045



V



DEPARTMENT OF MECHANICAL ENGINEERING GIT,GITAM (DEEMED TO BE UNIVERSITY) (Estd. u/s 3 of the UGC Act, 1956) NAAC Accredited with 'A+' Grade

VISAKHAPATNAM - 530 045

Prof. M.R.S. Satyanarayana Ph.D, FIE, MCMSI Head of the Department

#### Phone: 0891-2840250(Direct) E-mail: hod mech@gitam.edu

Date: 13-03-2020

DC meeting held on 13-03-2020 at 11:30P.M. in Board Room, Mechanical Bhavan.

#### Agenda:

- 1. To Change the name of the M.Tech Programme from Machine Design to Machine Design & Robotics
- 2. Any other item with the permission of the Chairman.

#### Members present:

- 1. Prof. M.R.S. Satyanarayana
- 2. Prof. V. Srinivas
- 3. Prof. B. Surendra babu
- 4. Prof. S. Narayana Rao
- 5. Prof. H. Ravi Sankar
- 6. Sri. P. Srinivas
- 7. Dr. D. Siva Prasad
- 8. Dr. Sandeep Alanka
- 9. Dr. K. Suresh

### Minutes & Resolution:

- 1. The chairman initiated the meeting by welcoming the members.
- The Chairman proposed to Change the name of the M.Tech Programme from Machine Design to Machine Design & Robotics. The committee members have unanimously accepted the proposal.
- 3. The meeting concluded with vote of thanks from Chairman.

Head of the department

Head of the Department Department of Mechanical Engineering GITAM Institute of Technology Gandhi Institute of Technology and Management (GITAM) (Deemed to be University) Visakhapatnam-530.045 Chairman Member Member Member Member Member Member Member



#### Accredited by NAAC with 'A+' Grade

# School of Technology DEPARTMENTOFAEROSPACEENGINEERNG

Internal Board of Studies (BoS) - Meeting Minutes

Date: 12-07-2020

The internal Board of Studies meeting for Department of Aerospace Engineering was held online on 9<sup>th</sup> July and 11<sup>th</sup> July, **2020 at 11:00 A.M.** 

### Members Present:

Prof. A. Satyadevi, BoS Chairman, Dept of Aerospace Engineering.

Mr. Md. Akhtar Khan, BoS member & Asst. Professor, AE

Mr. M. Satya Prasad, Asst. Professor, AE

Mr. A. Praveen Kumar, Asst. Professor, AE

Mr. S. Kishore Kumar, Asst. Professor, AE

Dr. P. Phani Kumar, Asst. Professor, AE

Dr. Ch. Sreenadh, Asst. Professor, AE

### Members Absent / on leave:

Dr. V. Hima Bindu, BoS member & Asst. Professor, AE is on Maternity leave

### The following points were discussed in the meeting:

1. Course objectives, outcomes and CO PO PSO mapping of the subjects offered by the department of Aerospace Engineering in the proposed syllabus.

### Outcomes:

1. Course objective, outcomes and CO PO PSO mapping of the subjects offered by the department of Aerospace Engineering are reviewed and finalized.

Prof. A. Satyadevi BoS-Chairman Dept. of Aerospace Engineering



#### DEPARTMENT OF BIOTECHNOLOGY, GITAM INSTITUTE OF TECHNOLOGY GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT (GITAM) (Deemed to be University) Visakhapatnam | Hyderabad | Bengaluru

The members discussed the above agenda items and resolved to approve the proposals herewith enclosed with effect from 2020-21.

### Item No.1:

To review the course structure, credits, course linearity and detailed syllabi of B.Tech Biotechnology with specialization in Artificial Intelligence & Machine Learning (AI&ML), effective from the 2020-21 admitted batch.

It is proposed to draft the regulations and syllabus for the B.Tech Biotechnology with specialization in Artificial Intelligence & Machine Learning effective from 20-21 admitted batches. The course structure contains: Humanities and management sciences, Basic sciences, Engineering sciences, Professional Core, Department or professional electives, Open electives, Interdepartmental or interdisciplinary electives, mandatory courses, internship, project work and skill development.

After through discussion with the members the following suggestions were made by the external member.

- The content for the Skill development/Activity based learning can be framed based on the information given in the web sites of Stanford University and Berkeley University.
- The topic 'Statistical thermodynamics' has been incorporated to the existing course on '19EBT204: Biochemical Thermodynamics'.
- The courses belonging to AI&ML specialization has to be 50% of the core courses in order to name it as AI&ML specialization
- Preambles of all courses have to be upgraded to include the entire course content.
- The existing title of the course `19EBT441:Plant equipment and design' has to be renamed as `Bioprocess plant design'
- The existing syllabus of the course `19EBT 346: Biotechnology of Fermented foods' has to be reduced.

The above suggestions have been incorporated and the regulations and syllabus has been approved and enclosed (Annexure-I).

## Item No.2:

It is proposed to introduce new Ph.D program in the area of Food Processing Technology under the Faculty of Engineering, effective from the academic year 2020-21.

• Ministry of Food Processing industries has sanctioned a grant of Rupees 75 lakhs to the Department of Biotechnology during the year 2010, for the 'creation of infrastructure for starting M.Tech Food processing Technology program'. Since then the department is offering M.Tech Food processing Technology program.

Faculty members of the department are working in the area of food processing technology and Department of Science and Technology has sanctioned research projects in the area of food processing technology. In this connection, it is proposed to introduce new Ph.D program in the area of Food Processing Technology under the Faculty of Engineering, effective from the academic year 2020-21.

It is proposed to modify the eligibility criteria for the admission into Ph.D Biotechnology from the academic year 2020-21.

• Eligibility criteria: The following modification has been proposed in the eligibility criteria for the admission into Ph.D Biotechnology effective from the academic year 2020-21.

Existing eligibility criteria	Proposed eligibility criteria
<ul> <li>i. M.Tech. / M.E. or equivalent degree in the concerned branch.</li> <li>ii. B.Tech. in Biotechnology or B.Pharm. or equivalent or B.Tech. Chemical Engineering or M.Sc.in Chemistry /Microbiology / Bioinformatics / Biotechnology) with proficiency in basic Biology with proficiency in basic Biology with proficiency in basic Mathematics.</li> </ul>	M.Tech. / M.E. or equivalent degree in the related fields with proficiency in basic Mathematics.

It is proposed that the revision in the syllabus for the Ph.D. entrance examination effective from 2020-21

• After through discussion, the revision in the syllabus for Ph.D entrance effective from 20-21 has been approved. The revised Ph.D entrance syllabus is enclosed at Annexure -IIa.

It is proposed to introduce an additional pre ph.D course, EBT 905: Molecular modelling and Pharmacoinformatics.

- In view of the recent developments in the field of biotechnology, an additional pre ph.D course (EBT 905: Molecular modelling and Pharmacoinformatics) was proposed and approved.
- The syllabus for the above mentioned course is enclosed Annexure –IIb.

## Item No.3:

Minor modification to the exiting course curriculum & syllabi of B.Tech. Biotechnology and M.Tech Food Processing Technology effective from the academic year 2020-21

• It is proposed to modify the syllabus of the B.Tech. Biotechnology effective from 2019-20 admitted batch.

After through discussions

- the minor modifications in the course curriculum and syllabus for the B.Tech Biotechnology, effective from 2019-20 admitted batch was approved and is enclosed (Annexure -IIIa).
- The above changes were recommended to accommodate the proposed course structure, to remove overlaps between core subjects and to enhance student based learning and practical skills.

It is proposed to review the course structure, credits, course linearity and detailed syllabi of M.Tech Food Technology effective 2020-21 admitted batch.

After through discussion with the members the following suggestions were made by the external member.

- The elective course on `19EBT754: Nutraceuticals and functional foods' was revised to incorporate the latest developments.
- The course on `19EBT755: Fruit and vegetable processing' was revised to incorporate aspects of waste management.
- Keeping in view the recent developments happening in the food industry sector, suggested introducing a course on 'applications of AI and ML in food processing'.

The above suggestions were incorporated and the midified syllabus has been approved and enclosed (Annexure-IIIc).

## Item No.4:

It is proposed to introduce new certificate courses in the department of Biotechnology, Institute of Technology. The expert member advised to start executive certificate programs rather than general certificate programs. And also advised to check MHRD regulations and web pages of various IIT's for complete details.

After through discussions, the members felt that there is a need to probe deep in to the Value added courses.

## Item No.5:

It is proposed to offer microcredit courses for meritorious students as value added courses.

After through discussions, the members felt that there is a need to probe deep in to the microcredit courses.

## Item No.6:

It is proposed to offer minor in Biotechnology to the meritorious students of other departments.

After through discussions, the members felt that there is a need to probe deep in to the frame the regulations for minor in Biotechnology.

The meeting ended with thanks to all members for their participation and suggestions.

## Department of Computer Science and Engineering GIT :: Visakhapatnam

Minutes of External BOS meeting held at 2.00PM on Saturday 15-2-2020 in the Department Seminar hall, 208 ICT Bhavan, Visakhapatnam.

### Members Present:

S.No.	Name of the Staff	Status
01.	Dr. K. Thammi Reddy	Chairperson
02.	Dr. T Sitamahalakshmi	Member
03.	Dr.P.V.Nageswara Rao	Member
04.	Dr.G.Appa Rao	Member
05.	Dr.P.V.Lakshmi	Member
06.	Dr.Y.Srinivas	Member
07.	Dr.M.Venkateswara Rao	Member
08.	Dr. Y Radhika	Member
09.	Dr. R Sireesha	Member
10.	Dr. Srinivas Prasad	Member
11.	Dr.G.Venkateswara Rao	Member
12.	Dr. G.V.S. Raj Kumar	Member
13.	Dr.Ravi.Bhramaramba	Member
14.	Dr. Ch. Suresh	Invitee
15.	Dr. S. Phani Kumar	Member
16.	Dr. M. Akkalakshmi	Member
17.	Dr. S. H. Brahmananda	Member
18.	Dr. P. Sanyasi Naidu	Member
19.	Dr. V. Ravi Shankar	Member
20.	Dr. T. Jyothirmayi	Member
21.	Dr. K. Subhadra	Member
22.	Sri.K.Ananad	Special Invitee
23	Sri Y.Ravi	Special Invitee
24.	Smt. B. Soujanya	BoS - Coordinator

Leave of absence is granted to Dr. D. Janakiram, Mr. PratapKolla, Dr. Vamsidhar Yendapalli, Dr. I.Jeena Jacob,

The Chairperson has extended a warm welcome to all the Members of Board of Studies (BoS) from Visakhapatnam, Hyderabad and Bengaluru campuses and thanked the special invitees for accepting the invitation and attending the BoS meeting.

The Chairperson introduced the BoS members to the Special invitees.

Agenda:

- 1. Ratification of the minutes of the previous Board of Studies meeting held on March 16,2019
- 2. Proposed B.Tech. Computer Science and Engineering programs with specializations from the academic year 2020-2021,
  - B.Tech. Computer Science and Engineering (Artificial Intelligence and Machine learning)
  - B.Tech. Computer Science and Engineering (Data Science)
  - B.Tech. Computer Science and Engineering (Cyber Security)
  - B.Tech. Computer Science and Engineering (Internet of Things)
- 3. Minor modifications in the B.Tech. (CSE) program structure of academic year 2019-20
- Ratification of B.Tech.(CSBS) 3rd & 4th semester syllabus and Minor modifications in 1<sup>st</sup>& 2<sup>nd</sup> Sem subject titles of B.Tech.(CSBS)
- 5. Change of Title for the PG program of M.Tech (CST) to M.Tech.(CSE) from the AY 2020-21
- 6. Minor modifications in the M.Tech. (CST), M.Tech.(Cyber Forensics and Information Security) and M.Tech. (Data Science)
- 7. Proposal to offer M.Tech. by Research program from the AY 2020-21
- 8. Ratification of the paper setters of B.Tech.(CSE), B.Tech..(IT), M.Tech. and Ph.D.
- 9. Ratification of Course Outcomes and Program Outcomes of B.Tech. (CSE) program
- 10. Any other item with the permission of the chair

The Chairperson placed the Agenda before the members and discussed the following points:

#### Item No:-1

The minutes of External BoS meeting held on March 16<sup>th</sup> 2019 were ratified.

#### Item No:-2

The Proposed Curriculum for B.Tech. Computer Science and Engineering programs with specializations for AY 2020-2021

- B.Tech. Computer Science and Engineering (Artificial Intelligence and Machine learning)
- B.Tech. Computer Science and Engineering (Data Science)
- B.Tech. Computer Science and Engineering (Cyber Security)
- B.Tech. Computer Science and Engineering (Internet of Things)

offered for AY 2020-21 were ratified.(Annexure-I)

## Item No:-3

a.) Minor modifications in the B.Tech. (CSE) program structure of academic year 2019-20 (Table showing modifications)

Sl.no.	Semester	Existing subject	Modifications Proposed	Remarks
1.	Ι	Communicative English I (19EHS131)	Communicative English(GEL131)	For the admitted batch of 2020-21 onwards the student will be offered Communicative English(GEL131)
2.	Ι	Problem Solving and Programming (19EID131)	Problem Solving and Programming with Python (19EID133R)	For the admitted batch of 2020-21 onwards the student will be offered Problem Solving and Programming with Python (19EID133R)
3.	Ι		Venture Discovery (19VDC111)	This course is introduced to the students admitted from 2020-21 AY onwards
4.	Π	Communicative English II ( 19EHS132 )	AI Tools/ Life Sciences for Engineers ( 19EID134 / 19EID234 )	For the admitted batch of 2020-21 onwards and the students will be offered AI tools / Life Sciences. For the admitted batch of 2019-20, "AI tools" (19EID134) are made compulsory in Sem-III and "Life Sciences for Engineers" ( 19EID234) are offered in Open Elective-I (Compulsory subject) in Semester- V
5.	Π	Object Oriented Programming Through Java (19ECS132)	Data Structures with python (19ECS237)	For the admitted batch of 2019-20, "Data structures with Python" (19ECS237) is offered in Semester- III and 0.5 credits allotted for Fundamental of python as a bridge course. For the admitted batch of 2020-21 "Object Oriented Programming Through Java(19ECS231)" will be studied in Sem III.
6.	П		Comprehensive Skill Development/Activity based Learning- I(19EHS122)	This course is introduced from 2020-21 onwards

These changes were ratified by the members of the BoS

b.) The syllabi of 3rd and 4<sup>th</sup> Sem of B.Tech.(CSE) 2019-20 were ratified. .(Annexure-II)

## Item No:-4

- a.) The syllabus of B.Tech.(CSBS) 3<sup>rd</sup> and 4<sup>th</sup>Semester syllabus received from TCS were ratified.(Annexure-III)
- b.) Minor modifications in the Subject titles of B.Tech.(CSBS) of 1<sup>st</sup> and 2nd sem shown in the given table were ratified.

Sl.no.	Semester	Existing Title	Proposed Change	Remarks
1.	Ι	Fundamentals of Physics+ Lab (19EPH137)	PhysicsforComputingScience (19EPH137)	ReceivedthesechangesfromTCSIndia Pvt. Ltd.
2.	I	Business Communication and Value Science – I (19EPH137) LTPC existing is 2002	Business Communication and Value Science-I (19EPH137) LTPC Proposed is 1022	Change of LTPC
3	II	Statistical Modeling(19EMA110)	StatisticalMethods(19EMA110)	Change of Title

## Item No:-5

Change of Title for the PG program of M.Tech (CST) to M.Tech.(CSE) from the AY 2020-21 were ratified.

#### Item No:-6

The members ratified the minor modifications proposed for M.Tech. (CSE) M.Tech. (Data Science) and M.Tech.(CFIS)

Sl.no.	Semester	Existing subject	Modifications	Remarks
			Proposed	
Chang	es in M.Tech.	(CSE) and Common Sub	jects	
1	Ι	Advanced Algorithms (19ECS705)	Algorithms and Analysis (19ECS705)	Change of Title and Syllabus from 2020-21 (Common to CSE/DS/CFIS)
2	Ι	Distributed Systems (19ECS745)	Cloud Computing (19ECS776)	Added to PE-I in place of Distributed Systems (Common to CSE/DS)

3	Ι		Data Warehousing and Mining (19ECS753)	New elective added to PE-I( Common to CSE/DS)
4	Ι		Internet of Things (19ECS781)	New elective added to PE-I( Common to CSE/DS)
	Ι		Agile Software	New elective added to
5			Development (19ECS777)	PE-I( Common to CSE/DS/CFIS)
6	II	Digital Forensics Laboratory (19ECS724)	Deep Learning and data analytics Laboratory (19ECS730)	Change of Subject (Common to CSE/DS)
7	II	Technical Seminar (19ECS792)	Technical Paper Writing (19ECS792)	Change of Subject Title (Common to CSE/DS/CFIS)
8	II	Computer Vision (19ECS746)	Data Visualization (19ECS765)	Added to PE-III in the place of Computer vision (Common to CSE/DS)
9	Π	Secure Software Design and Enterprise Computing (19ECS744)	Data Storage Technologies and Networks (19ECS769)	Added to PE-III in the place of SSD&EC (Common to CSE/DS)
10	II		Big Data Analytics (19ECS767)	Added to PE-III (Common to CSE/DS)
11	II		Cyber security (19ECS779)	Added into PE-III (Common to CSE/DS)
12	II	Human and Computer Interaction (19ECS748)	Web Analytics and Development (19ECS771)	Added to PE-IV in the place of HCI (Common to CSE/DS)
13	II	Digital Forensics (19ECS752)	Deep Learning (19ECS773)	Added to PE-IV in the place of DF(Common to CSE/DS)
14	Π	Compilers for High Performance Computing (19ECS756)	Data Security and Access Control (19ECS772)	Added to PE-V in the place of CHP (Common to CSE/DS)
15	II	Optimization Techniques (19ECS758)	Social Network Analysis (19ECS774)	Added to PE-V in the place of OT (Common to CSE/DS)
			Natural Language	Added into PE-V

16	II		Processing (19ECS775)	(Common to CSE/DS)
17	II		Software Project Management (19ECS783)	Added into PE-V (Common to CSE/DS)
Change	es in M.Tech. (	(Data Science)		
18	Ι	Mathematical Foundations of Computer Science(19ECS703)	Statistical Modeling (19EMA110) Change of su	
Change	es in M.Tech. (			
19	Ι	Data Warehousing and Data Mining (19ECS753)	Secure coding (19ECS764)	Moved from PE-IV to PE-I in the place of DWDM
20	Ι	Intrusion Detection (19ECS755)	Internet technologies and cyber laws (19ECS778)	Change of Subject (PE-I)
21	Ι		Agile Software Development (19ECS777)	Added into PE-II
22	Ι	Data Science and Machine Learning Laboratory (19ECS727)	Ethical Hacking Lab (19ECS729)	Change of Subject
23	II	Information Theory and Coding (19ECS762)	Intrusion detection and prevention system (19ECS782)	Change of Subject (PE-III)
24	II		Web Application Security (19ECS780)	Added into PE-III
25	II		Cloud Security (19ECS786)	Added into PE-IV
26	Π	Web Search and Information Retrieval (19ECS770)	Mobile application security (19ECS784)	Change of Subject (PE-V)
27	II		Block chain Technology (19ECS785)	Added into PE-V

## Item No:-7

Elaborate discussions were happened among the members to initiate M.Tech. by Research program, some of the members have expressed its viability of offering the program from AY 20-21. The proposal needs to be studied further.

## Item No:-8

The Paper setters of B.Tech.(CSE), B.Tech.(IT), M.Tech and Ph.D were ratified.

### Item No:-9

The members of BoS has ratified the Course Outcomes and Program Outcomes for the B.Tech.(CSE) program.

## Item No:-10

The members suggested to encourage students for various industry oriented certifications which will add weightage to their resumes at the time of placements.

The meeting ended with thanks by the chair to all the members attended.

(Prof. K. Thammi Reddy) Chairman-BOS

## Department of Electrical, Electronics and Communication Engineering GITAM (Deemed to be University)

Minutes of the meeting conducted with members of EECE Department Board of Studies Committee at 02:00pm on 15-02-2020 in ICT408-EECE Seminar Hall

## **Members Present:**

- 1. Prof. P.V.Y.Jayasree, Chairperson, BoS & Head, ECE In chair
- 2. Prof. C Dharma Raj, GIT, Visakhapatnam
- 3. Prof. D Elizabath Rani, GIT, Visakhapatnam
- 4. Prof. V Malleswara Rao, GIT, Visakhapatnam
- 5. Prof. J B Seventline, GIT, Visakhapatnam
- 6. Prof. G V K Sharma, GIT, Visakhapatnam
- 7. Prof. T Madhavi, GIT, Visakhapatnam
- 8. Prof. V B SrilathaIndira Dutt, GIT, Visakhapatnam
- 9. Prof K. Manjunathachari, SoT, Hyderabad
- 10. Prof P.Trinadha Rao, SoT, Hyderabad
- 11. Prof Mohan Kumar N, SoT, Bengaluru
- 12. Dr G. Karunakar, Assoc. Prof., GIT, Visakhapatnam
- 13. Dr.I E S Naidu, Assoc. Prof., GIT, Visakhapatnam
- 14. Dr L LRajeswara Rao, Asst.Prof.,GIT, Visakhapatnam
- 15. Dr T Padmavathi, Asst.Prof., GIT, Visakhapatnam
- 16. Dr. B. Rajesh Kumar, Associate Professor Special Invitee
- 17. Dr. B. Uday Kumar, Associate Professor Special Invitee
- 18. Mr. K. Aravind Kumar, Assistant Professor Special Invitee
- 19. Mr. M. Ramu, Assistant Professor Special Invitee

## **Members Absent**

- 1. Dr. K. Kiran Kuchi, Professor, Department of EE, IITH
- 2. Dr. H. S. Jatana, SCL, Mohali
- 3. Prof T. Ruckmongathan, SoT, Bengaluru
- 4. Dr. Ajay Kumar Mandava, SoT, Bengaluru

## Agenda

- 1. Introduction of B.Tech. ECE with specialization in VLSI Design, IoT, Medical Electronics and Artificial Intelligence & Machine Learning.
- 2. Introduction of B.Tech. EEE with specialization in Robotics & Automation.
- 3. Introduction of new M.Tech. (Bio Medical Instrumentation & signal Processing) Program w.e.f. 2020-21AB.
- 4. Introduction of extra pre-Ph.D courses for EEE Scholars of EECE Department.
- 5. Detailed syllabus approval with course objectives, learning outcomes and course outcomes of all B.Tech Programmes.
- 6. Introduction of additional Audit Course in M.Tech PSA programme w.e.f. 2020-21AB

The chairperson welcomed the BoS members and agenda items were taken up for discussion.

## 1. Introduction of B.Tech. ECE with specialization in VLSI Design, IoT, Medical Electronics and Artificial Intelligence & Machine Learning in 2019-20 regulations.

After thorough deliberations and inclusion of suggestions, the scheme of BTech ECE Programmes with specialization in VLSI Design, IoT, Medical Electronics and AI & ML are approved.

The below modifications are incorporated in the 2019-20 scheme and syllabi of B.Tech ECE Programme and EEE Programme (approved in previous academic council meeting)

- a) A 2-credit course on "Fundamentals of Entrepreneurship" is offered in coordination with GITAM Center for Entrepreneurship Education (GCEE), Venture. Development Center (VDC) in Semester-I
- b) Provision for Skill development is included in Semesters II to VII with 6 hours of Activity per week having 1 Credit each
  - i. In Semester II and III under HS category
  - ii. In Semesters IV-VII under PW category
- c) A course on "*Gandhian Philosophy for the 21<sup>st</sup> Century /Contemporary World*" is included under HS category in V sem.
- d) Design Practice from VI sem is removed & most Program Electives and Interdisciplinary electives are made practical oriented (LTPC: from 3 0 0 3 to 2 0 2 3)
- e) To ensure load balancing
  - i. AI Tools & Design Thinking and Product Innovation to be offered in II, III semesters
  - ii. IoT & Life Sciences for Engineers to be offered in in IV, V semesters
- f) For each BTech ECE specialization, three core courses are included relevant to the specialization and in this process
  - i. Core course on "Introduction to VLSI Design" moved to Program Elective
  - ii. Number of Program Electives reduced from 6 to 5.
  - iii. Number of Interdisciplinary Electives reduced from 3 to 2.
  - iv. A new stream of Program elective courses are introduced relevant to each specialization in addition to regular streams (including Communication Systems, Signal Processing, Embedded Systems, RF & Microwave Engineering)

Table below summarizes the changes made to Regular BTech ECE scheme to arrive at the scheme of each specialization.

S.No.	Specialization	Regular BTech ECE Scheme	BTech ECE Scheme with Specialization	Remarks	
		Introduction to VLSI Design	Sensors for IoT	<ul><li>New stream of PEs</li><li>IoT Applications</li></ul>	
	Internet of	Program Elective I	Programming IoT	Cloud and Fog	
1.	Things	Interdisciplinary Elective I	IoT Architecture and Protocols	<ul> <li>computing</li> <li>Computer Vision</li> <li>IoT Security</li> <li>Operating Systems</li> </ul>	
		Introduction to VLSI Design	Basic VLSI Design	<ul><li>New Stream of PEs</li><li>Modern</li></ul>	
		Program Elective I	Digital Design with FPGAs	Semiconductor Devices	
2.	VLSI Design	Interdisciplinary Elective I	VLSI Design Automation	<ul> <li>Analog IC Design DSF Design with FPGAs</li> <li>Computer Organization and Architecture</li> <li>Fundamentals of VLSI Device Fabrication</li> </ul>	
3.	Artificial	Introduction to VLSI	Artificial Neural	New Stream of PEs	
	Intelligence and Machine Learning	Design Program Elective I	Networks AI in VLSI Design Automation	<ul> <li>Data Structures and Algorithms</li> <li>Machine Learning</li> </ul>	
		Interdisciplinary Elective I	AI in Wireless Communications	<ul> <li>Deep Learning</li> <li>Advanced Artificial Intelligence</li> <li>Data Analytics</li> </ul>	
4.	Medical Electronics	Introduction to VLSI Design	Anatomy and Human Physiology	<ul><li>New Stream of PEs</li><li>Bio Mechanics</li></ul>	
		Program Elective I	Bio-Medical Instrumentation	Biomedical signal     processing	
		Interdisciplinary Elective I	Medical Image Processing	<ul> <li>Embedded Systems in Medical Devices</li> <li>Diagnostic and Therapeutic Equipment</li> <li>Wearable systems</li> </ul>	

The detailed scheme of Regular BTech ECE, B.Tech. ECE with specialization in VLSI Design, IoT, Medical Electronics and AI & ML are included in **Annexure I** (along with syllabi of new Core courses and Program Electives introduced in each specialization).

Table below furnishes the changes made (semester-wise) in the 2019-20 scheme and syllabi of Regular B.Tech ECE.

Semester	Original Course	Modified Course/Credits	Total credits	
		course/creatts	Original	Modified
I		Fundamentals of Entrepreneurship – New Course – 2 credits	18/19	19.5/20.5
-	Communicative English I- 3.5 credits	Communicative English -3 credits		
II	Communicative English-II	<ol> <li>AI Tools/Design</li> <li>Thinking and Product</li> <li>Innovation</li> <li>Skill development/</li> <li>Activity based learning</li> </ol>	20.5/19.5	21/20
III	Design thinking and Product Innovation	Design Thinking and Product Innovation /AI Tools	20.5	21.5
	Life Sciences for Engineers/AI tools	<ol> <li>Electromagnetic waves</li> <li>Skill development/</li> <li>Activity based learning</li> </ol>		
	AI tools/ Life Sciences for Engineers	Internet of Things / Life Sciences for Engineers	22.5	23.5
IV	Electromagnetic waves	<ol> <li>1.Control system</li> <li>Engineering</li> <li>2. Skill development/</li> <li>Activity based learning</li> </ol>		
	Internet of Things	Internet of Things / Life Sciences for Engineers	23.5	22.5
V	Control system Engineering	<ul> <li>1.Skill development/ Activity based learning with 1credit</li> <li>2. Gandhian Philosophy for the 21st Century / Contemporary World with</li> <li>1 Credit</li> </ul>		
VI	Design Practice	Skill development/Activity based learning	22	23
VII	<ol> <li>Project Phase I- 2 credits</li> <li>Internship-2 credits</li> </ol>	Skill development/Activity based learning 1.Project phase I-1credit 2.Internship-1 credit	19	19
VIII	No change	No change	12	12
	Total Credits	•	160	162

## 2. Introduction of B.Tech. EEE with specialization in Robotics & Automation.

After thorough deliberations and inclusion of suggestions, the Scheme & Syllabus of Regular BTech EEE, BTech EEE Programme with specialization in Robotics & Automation are approved.

Table below furnishes the changes made (semester-wise) in the 2019-20 scheme and syllabi of Regular B.Tech EEE.

Semester	Original Course	Modified Course	Credits – Original	Credits - Modified
Ι	Communicative English-I – 3.5 credits	Fundamentals of Entrepreneurship – New Course – 2 credits Communicative English- 3 credits	18/19	19.5/20.5
II	Communicative English-II	Design Thinking and Product Innovation/AI Tools Skill Development/ Activity based Learning- 1 1credit	20.5/19.5	21/20
III	Life sciences for engineers/AI Tools Design Thinking and Product Innovation	Design Thinking and Product Innovation/AI Tools Electromagnetic Fields Skill Development/ Activity based Learning- 2 – 1 credit	21	22
IV	Life sciences for engineers/AI Tools	Internet of Things / Life Sciences for Engineers Skill Development/ Activity based Learning -3 1credit	22.5	20.5
V	Control system engineering and Control system engineering Lab Internet of Things	Linear Control System Life Sciences for Engineers /Internet of	21	23
		Things Skill Development/ Activity based Learning-4 1credit Gandhian Philosophy for the 21 <sup>st</sup> Century /Contemporary World 1credit		
VI		Skill Development/ Activity based Learning-5 1credit	24	24.5
VII		Skill	20	19.5

		Development/Activity based Learning-6 1credit		
	Project phase I-	Project phase I-		
	2 credits	1 credit		
	Internship-2 credits	Internship-1 credit		
VIII	Project Phase II-	Project Phase II-6	13	12
	7 credits	credits		
	Total Credits			162

- g) For BTech EEE specialization, three core courses are introduced relevant to the specialization and in this process
  - i. Core course on Power Electronics removed
  - ii. Number of Program Electives reduced from 6 to 5.
  - iii. Number of Interdisciplinary Electives reduced from 3 to 2.
  - A new stream of Program elective courses are introduced relevant to each specialization in addition to regular streams (including Power Systems, Control Systems, Power Electronics & Drives)

Table below summarizes the changes made to Regular BTech EEE scheme to arrive at the scheme of each specialization.

S.No	Specialization	Regular BTech EEE Scheme	BTech EEE Scheme with Specialization	Remarks
		Power Electronics	Principles of Robotics	New stream of PEs
		Program Elective I	Programmable logic controllers	<ul><li>Elements of Mechatronics</li><li>Industrial robotics and</li></ul>
1.	Robotics and Automation	Interdisciplinary Elective I	AI in Robotics	<ul> <li>material handling systems</li> <li>Adaptive control</li> <li>Wireless and Sensor networks</li> <li>Computer vision systems</li> </ul>

The detailed scheme of the above BTech Programmes is included in **Annexure II** (along with syllabi of new Core and Program Electives introduced in Robotics and Automation specialization).

# 3. Introduction of new M.Tech. (Biomedical Instrumentation & Signal Processing) Program for admitted batch 2020-21.

After thorough deliberations and inclusion of suggestions, the Scheme & Syllabus of new M.Tech. (Bio-Medical Instrumentation & Signal Processing) Program for admitted batch 2020-21 is approved.

The below suggestions are made during the deliberations

- a) Biomedical Workshop to be introduced covering the usage of all Biomedical equipment available in the medical college and used extensively for patient monitoring and diagnosis.
- b) NPTEL Courses covering medical research, biomedical content to be considered for inclusion as elective courses.

The detailed scheme and syllabi of the above new MTech Programme is included in **Annexure III**.

## 4. Introduction of extra pre-Ph.D courses for EEE Scholars of EECE Department.

Resolved to include the below new pre-Ph.D courses for EEE Scholars of EECE Department.

S.No	Course	Course Name
	Code	
1	EEE 901	Power System Dynamics and Stability
2	EEE 902	Flexible A.C Transmission systems
3	EEE 903	Electrical Distribution Systems
4	EEE 904	Power Quality
5	EEE 905	Power Systems Operation & Control
6	EEE 906	Reactive Power Compensation & Management
7	EEE 907	Voltage Stability
8	EEE 908	Wind Energy Control & Applications
9	EEE 909	Smart Grid Technologies
10	EEE 910	Renewable Energy Technologies
11	EEE 911	Power Electronics for Renewable Energy Systems
12	EEE 912	Electric Vehicles
13	EEE 913	Application of Solar & Wind Energy Systems
14	EEE 914	AI Techniques for Power Systems
15	EEE 915	Advanced Power System Protection
16	EEE 916	Modern Control Theory
17	EEE 917	Power Electronic Control of AC Drives
18	EEE 918	Robotics

The detailed syllabi of the above pre-PhD courses are included in **Annexure IV**.

## 5. Detailed syllabus approval with course objectives, learning outcomes and course outcomes of all B.Tech Programmes.

The detailed syllabi **(included in Annexure V)** including course preamble, course objectives, learning outcomes, course outcomes of all courses in B.Tech ECE and EEE w.e.f. 2019-20 admitted batch are approved.

- 6. The following changes are proposed and approved in interdisciplinary electives offered by the department of EECE.
  - a) One of the IDE II courses, Sensors and Technology (19EEI371) is approved to be replaced with the course "Sensors and Signal Conditioning" with the same course code.
  - b) The title of one of the IDE III courses, Micro Electro Mechanical Systems (19EEI472) to be changed as "Introduction to MEMS".
  - c) Approved to include new IDE III Course "Virtual Instrumentation" (19EEI473) in B.Tech ECE structure. Detailed syllabi provided in **Annexure-VI**

 As per the suggestions given in previous Academic Council meeting, an elective on Software Defined Networks is introduced as part of Programme Elective VI in BTech ECE Structure. Detailed Syllabus is provided in Annexure-V

## 8. Introduction of additional Audit Course in M.Tech PSA programme w.e.f. 2020-21AB

Resolved to add 19EAC747 – Stress Management by Yoga (offered for M.Tech VLSI Design w.e.f. 2019-20AB) as additional audit course offered for M.Tech PSA Programme w.e.f. 2020-21AB (in addition to the existing list of audit courses)

With no other items to discuss further, the meeting concluded with thanks to and from the Chair.

(P.V.Y.Jayasree)