Department of Electronics and Communication Engineering

Action Taken Report (ATR) on Students Feedback (BTECH) received during the AY 2022-2023

Department	Stakeholder	Feedback received	Action Taken
Department of Electronics and Communication Engineering	Student	➢ The students opined excellently (31.27 %) about the offering of the electives in terms of their relevance to the specialization streams and experiments about real-life applications. ➢ The students opined excellent (37.24 %) about the Course's applicability to employability skills. ➢ The students opined very good (42.44 %) about the Course imparting entrepreneurial skills. ➢ The students opined very good (39.56%) for offering relevant laboratory courses to develop practical skills. ➢ The students opined very good (44.92%) that the curriculum creates social awareness on social issues. ➢ The students opined excellent (40.25%) for having good courses for soft skills. ➢ The students opined poor (4.36%) for curriculum structure looks to be appropriate to develop the necessary skill set and impart the knowledge required for a professional. .	• The number of discipline Elective Courses have been increased. Students have given options to pick courses in each area of specialization. • The content of the majority of the courses have been revised and are associated with the industry's need. • Every Course has been mapped for employability, entrepreneurship or skill development with a change in content. Change in teaching pedagogy has also been adopted to impart these skills effectively. • As there was scope for improvement, the number of courses relevant to specializations significantly increased. • E Library Resources have been integrated with all courses with web links, hence students can access them anytime. • Many new courses have been integrated with their respective Lab components, and many lab's subject have been modified by more than 20%. Also, many new Open Electives have been offered. • Credits for a few courses have been increased suitably as per the modern industry needs.

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As per the feedback received, Course Content Revisions have been made as per Annexure -I and New Courses have been included in Annexure –II.

Annexure – I

List of B.Tech Courses in which Content Revision

Sr. No	Code	Course Name	L	T	P	C
1	ECE1003	Fundamentals of Electronics	3	0	0	3
2	ECE2007	Digital Design (CSE 2021 Batch Onwards)	2	0	2	3
3	ECE3013	Antenna and Wave Propagation	3	0	0	3
4	ECE3015	Measuring Instruments and Sensors (from 2021 onwards)	3	0	0	3
5	ECE3049	Developing Secure Embedded Systems	3	0	0	3
6	ECE3050	Design for Testability	3	0	0	3
7	ECE3051	Machine Learning and Deep Learning Using FPGAs	3	0	0	3
8	ECE3052	Introduction to Embedded Machine Learning	3	0	0	3
9	ECE3054	Mobile Communication	3	0	0	3
10	ECE3055	Satellite Communication	3	0	0	3
11	ECE3056	Wireless Communication and Networks	3	0	0	3
12	ECE3057	Radar Engineering	3	0	0	3
13	ECE3058	Radio Frequency Engineering	3	0	0	3
14	ECE3059	Security in Computer Networks	3	0	0	3
15	ECE3060	Wireless Adhoc Networks	3	0	0	3
16	ECE3061	Optical Communication	3	0	0	3
17	ECE3062	Fundamentals of Wearable Sensing	3	0	0	3
18	ECE3063	Wearable Devices and Its Applications	3	0	0	3
19	ECE3064	Embedded Platforms for Wearables	3	0	0	3
20	ECE3065	RFID and Flexible Sensors	3	0	0	3
21	ECE3066	Wireless Technologies for Wearables	3	0	0	3
22	ECE3067	Wearable Internet of Things (WIoT)	3	0	0	3

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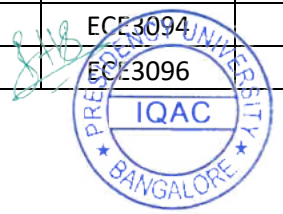
23	ECE3068	Embedded Intelligence in WIoT	3	0	0	3
24	ECE3069	Flexible Electronics And Sensors	3	0	0	3
25	ECE3070	AI & Digital Health	3	0	0	3
26	ECE3071	Wearable and Ubiquitous Computing	3	0	0	3
27	ECE3072	Secure Wearable Internet of Things	3	0	0	3
28	ECE3073	Wearable Prosthetics and Robots	3	0	0	3
29	ECE3074	Applications of Brain Computer Interfaces	3	0	0	3
30	ECE3075	IoT: Architecture and Protocols	3	0	0	3
31	ECE3076	IoT Platforms and Application Development	3	0	0	3
32	ECE3077	Wireless Protocols for IoT	3	0	0	3
33	ECE3078	IoT and Cloud Computing	3	0	0	3
34	ECE3079	Fog Computing	3	0	0	3
35	ECE3080	IoT Edge Nodes and its Applications	3	0	0	3
36	ECE3081	Security and Privacy in Traditional IoT Systems	3	0	0	3
37	ECE3082	Data Science for IoT	3	0	0	3
38	ECE3083	Hardware and Software Architectures for IoT Systems	3	0	0	3
39	ECE3084	Mobile App Development for IoT	3	0	0	3
40	ECE3085	Security and Privacy in Edge Native Solutions	3	0	0	3
41	ECE3086	Industrial Internet of Things (IIoT)	3	0	0	3
42	ECE3087	IoT Robots	3	0	0	3
43	ECE3088	Internet of Medical Things (IoMT)	3	0	0	3
44	ECE3089	Artificial Neural Networks	3	0	0	3
45	ECE3090	Digital System Design using VERILOG	3	0	0	3
46	ECE3091	Mathematical Physics	3	0	0	3
47	ECE3092	Photonic Integrated Circuits	3	0	0	3
48	ECE3093	Machine learning for Music Information Retrieval	3	0	0	3
49	ECE3094	Video Processing and Computer Vision	3	0	0	3
50	ECE3096	Natural Language Processing	3	0	0	3



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Annexure – II

List of B.Tech New Courses introduced

S. No.	COURSE CODE	COURSE NAME	L	T	P	C
1	ECE 601	Foundations of Industrial VLSI Design	2	0	0	2
2	ECE 602	Digital Design and Verification	2	0	0	2
3	ECE 603	Design For Testability	2	0	0	2
4	ECE 604	Physical Design	2	0	0	2
5	ECE 605	Data Science for Engineers	2	0	0	2
6	ECE 606	Electronics Equipment Integration and Prototype Building	2	0	0	2
7	ECE 607	Foundation of Cloud IoT Edge ML	2	0	0	2
8	ECE 608	Fuzzy Logic And Neural Networks	2	0	0	2
9	ECE 609	Digital Design	2	0	0	2
10	ECE 610	Digital Verification	2	0	0	2
11	ECE2009	Digital Computer Fundamentals (For BCA 2022 Batch onwards)	2	0	2	3
12	ECE3006	Digital Control Systems	3	0	0	3
13	ECE3053	Data Communication and Networking (DE from 2022 onwards)	3	0	0	3
14	ECE3089	Artificial Neural Networks	3	0	0	3
15	ECE3095	Blockchain and Cryptocurrency Technolgies	3	0	0	3
16	ECE3097	Smart Electronics in Agriculture	3	0	0	3
17	ECE3098	Environment Monitoring Systems	3	0	0	3
18	ECE3099	Modern Wireless Communication with 5G	3	0	0	3
19	ECE3100	Underwater Communication	3	0	0	3
20	ECE3101	Printed Circuit Board Design	3	0	0	3
21	ECE3102	Consumer Electronics	3	0	0	3
22	ECE3103	Product Design of Electronic Equipment	3	0	0	3
23	ECE3104	Vehicle to Vehicle Communication	3	0	0	3
24	ECE3105	Wavelets and Filter Banks	3	0	0	3
25	ECE3106	Introduction to Data Analytics	3	0	0	3
26	ECE3107	Machine Vision for Robotics	3	0	0	3
27	ECE3110	Internet of Things (IOT) (for BCA)	1	0	4	3

28	ECE3111	Microprocessors and Microcontrollers (for CSE)	3	0	0	3
29	ECE3113	Foundations of Industrial VLSI Design	3	0	0	3
30	ECE3114	Digital Design and Verification	3	0	0	3
31	ECE3115	Physical Design	3	0	0	3
32	ECE3116	Digital Circuit Design	3	0	0	3
33	ECE3117	Digital Verification	3	0	0	3
34	ECE3118	Hardware Security and Trust	3	0	0	3

Department of Electronics and Communication Engineering

Action Taken Report (ATR) on Faculty Feedback for BTECH received during the AY 2022-2023

Department	Stakeholder	Feedback received	Action Taken
Electronics and Communication Engineering	Faculty	➢ 30.27% and 42.68 % of faculty rate excellent and very good, respectively, for the Syllabus, is suitable for the course. ➢ 44.67% of faculty have opined (very good) Syllabus is need-based. ➢ 41.44% of faculty have opined that the courses/syllabus has very good balance between theory and application ➢ 76% of the faculty have opined that they have the freedom to propose, modify, suggest and incorporate new topics in the Syllabus. ➢ 46.15% of the faculty have opined that they have the total freedom to adopt new techniques/strategies of teaching, such as seminar presentations, group discussions and learner participation ➢ More than 66% of faculty think that the department has either an excellent or very good environment for teaching and research.	➢ Inputs from faculty members were collected and deliberated, and course revisions were implemented. ➢ The application aspect of each course has been enhanced by thorough content revision. ➢ An enhnaced system has been created through which regular feedback and suggestions from faculty members about new topic is being included. ➢ The SOE-ECE conducts the Board of Studies (BoS) meeting twice a year. Feedback from the faculty members on the curriculum and new CBCS was presented and discussed.

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As per the feedback received, Course Content Revisions have been made as per Annexure -I and New Courses have been included in Annexure –II.

Annexure – I

List of B.Tech Courses in which Content Revision

Sr. No	Code	Course Name	L	T	P	C
1	ECE1003	Fundamentals of Electronics	3	0	0	3
2	ECE2007	Digital Design (CSE 2021 Batch Onwards)	2	0	2	3
3	ECE3013	Antenna and Wave Propagation	3	0	0	3
4	ECE3015	Measuring Instruments and Sensors (from 2021 onwards)	3	0	0	3
5	ECE3049	Developing Secure Embedded Systems	3	0	0	3
6	ECE3050	Design for Testability	3	0	0	3
7	ECE3051	Machine Learning and Deep Learning Using FPGAs	3	0	0	3
8	ECE3052	Introduction to Embedded Machine Learning	3	0	0	3
9	ECE3054	Mobile Communication	3	0	0	3
10	ECE3055	Satellite Communication	3	0	0	3
11	ECE3056	Wireless Communication and Networks	3	0	0	3
12	ECE3057	Radar Engineering	3	0	0	3
13	ECE3058	Radio Frequency Engineering	3	0	0	3
14	ECE3059	Security in Computer Networks	3	0	0	3
15	ECE3060	Wireless Adhoc Networks	3	0	0	3
16	ECE3061	Optical Communication	3	0	0	3
17	ECE3062	Fundamentals of Wearable Sensing	3	0	0	3
18	ECE3063	Wearable Devices and Its Applications	3	0	0	3
19	ECE3064	Embedded Platforms for Wearables	3	0	0	3
20	ECE3065	RFID and Flexible Sensors	3	0	0	3
21	ECE3066	Wireless Technologies for Wearables	3	0	0	3
22	ECE3067	Wearable Internet of Things (WIoT)	3	0	0	3

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23	ECE3068	Embedded Intelligence in WIoT	3	0	0	3
24	ECE3069	Flexible Electronics And Sensors	3	0	0	3
25	ECE3070	AI & Digital Health	3	0	0	3
26	ECE3071	Wearable and Ubiquitous Computing	3	0	0	3
27	ECE3072	Secure Wearable Internet of Things	3	0	0	3
28	ECE3073	Wearable Prosthetics and Robots	3	0	0	3
29	ECE3074	Applications of Brain Computer Interfaces	3	0	0	3
30	ECE3075	IoT: Architecture and Protocols	3	0	0	3
31	ECE3076	IoT Platforms and Application Development	3	0	0	3
32	ECE3077	Wireless Protocols for IoT	3	0	0	3
33	ECE3078	IoT and Cloud Computing	3	0	0	3
34	ECE3079	Fog Computing	3	0	0	3
35	ECE3080	IoT Edge Nodes and its Applications	3	0	0	3
36	ECE3081	Security and Privacy in Traditional IoT Systems	3	0	0	3
37	ECE3082	Data Science for IoT	3	0	0	3
38	ECE3083	Hardware and Software Architectures for IoT Systems	3	0	0	3
39	ECE3084	Mobile App Development for IoT	3	0	0	3
40	ECE3085	Security and Privacy in Edge Native Solutions	3	0	0	3
41	ECE3086	Industrial Internet of Things (IIoT)	3	0	0	3
42	ECE3087	IoT Robots	3	0	0	3
43	ECE3088	Internet of Medical Things (IoMT)	3	0	0	3
44	ECE3089	Artificial Neural Networks	3	0	0	3
45	ECE3090	Digital System Design using VERILOG	3	0	0	3
46	ECE3091	Mathematical Physics	3	0	0	3
47	ECE3092	Photonic Integrated Circuits	3	0	0	3
48	ECE3093	Machine learning for Music Information Retrieval	3	0	0	3
49	ECE3094	Video Processing and Computer Vision	3	0	0	3
50	ECE3096	Natural Language Processing	3	0	0	3

Annexure – II

List of B. Tech New Courses introduced

S. No.	COURSE CODE	COURSE NAME	L	T	P	C
1	ECE 601	Foundations of Industrial VLSI Design	2	0	0	2
2	ECE 602	Digital Design and Verification	2	0	0	2
3	ECE 603	Design For Testability	2	0	0	2
4	ECE 604	Physical Design	2	0	0	2
5	ECE 605	Data Science for Engineers	2	0	0	2
6	ECE 606	Electronics Equipment Integration and Prototype Building	2	0	0	2
7	ECE 607	Foundation of Cloud IoT Edge ML	2	0	0	2
8	ECE 608	Fuzzy Logic And Neural Networks	2	0	0	2
9	ECE 609	Digital Design	2	0	0	2
10	ECE 610	Digital Verification	2	0	0	2
11	ECE2009	Digital Computer Fundamentals (For BCA 2022 Batch onwards)	2	0	2	3
12	ECE3006	Digital Control Systems	3	0	0	3
13	ECE3053	Data Communication and Networking (DE from 2022 onwards)	3	0	0	3
14	ECE3089	Artificial Neural Networks	3	0	0	3
15	ECE3095	Blockchain and Cryptocurrency Technolgies	3	0	0	3
16	ECE3097	Smart Electronics in Agriculture	3	0	0	3
17	ECE3098	Environment Monitoring Systems	3	0	0	3
18	ECE3099	Modern Wireless Communication with 5G	3	0	0	3
19	ECE3100	Underwater Communication	3	0	0	3
20	ECE3101	Printed Circuit Board Design	3	0	0	3
21	ECE3102	Consumer Electronics	3	0	0	3
22	ECE3103	Product Design of Electronic Equipment	3	0	0	3
23	ECE3104	Vehicle to Vehicle Communication	3	0	0	3
24	ECE3105	Wavelets and Filter Banks	3	0	0	3
25	ECE3106	Introduction to Data Analytics	3	0	0	3
26	ECE3107	Machine Vision for Robotics	3	0	0	3
27	ECE3110	Internet of Things (IOT) (for BCA)	1	0	4	3
28	ECE3111	Microprocessors and Microcontrollers (for CSE)	3	0	0	3

29	ECE3113	Foundations of Industrial VLSI Design	3	0	0	3
30	ECE3114	Digital Design and Verification	3	0	0	3
31	ECE3115	Physical Design	3	0	0	3
32	ECE3116	Digital Circuit Design	3	0	0	3
33	ECE3117	Digital Verification	3	0	0	3
34	ECE3118	Hardware Security and Trust	3	0	0	3

Department of Electronics and Communication Engineering

Action Taken Report (ATR) on Employer Feedback for BTECH received during the AY 2022-2023

Department	Stakeholder	Feedback Received	Action Taken
Electronics and Communication Engineering	Employer	➢ Students need to be aware of industry exposure. ➢ The recruiters from IT companies and other industries suggested that students must be more participative and work more effectively with teams.	• Invited resource persons from industries were made to address the students. • Many activities and competitions are organized in the department to increase their participation and improve their problem-solving abilities. • The soft skill training focused more on participative games and team building.

As per the feedback received, Course Content Revisions have been made as per Annexure -I and New Courses have been included in Annexure –II.

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Annexure – I

List of B.Tech Courses in which Content Revision

Sr. No	Code	Course Name	L	T	P	C
1	ECE1003	Fundamentals of Electronics	3	0	0	3
2	ECE2007	Digital Design (CSE 2021 Batch Onwards)	2	0	2	3
3	ECE3013	Antenna and Wave Propagation	3	0	0	3
4	ECE3015	Measuring Instruments and Sensors (from 2021 onwards)	3	0	0	3
5	ECE3049	Developing Secure Embedded Systems	3	0	0	3
6	ECE3050	Design for Testability	3	0	0	3
7	ECE3051	Machine Learning and Deep Learning Using FPGAs	3	0	0	3
8	ECE3052	Introduction to Embedded Machine Learning	3	0	0	3
9	ECE3054	Mobile Communication	3	0	0	3
10	ECE3055	Satellite Communication	3	0	0	3
11	ECE3056	Wireless Communication and Networks	3	0	0	3
12	ECE3057	Radar Engineering	3	0	0	3
13	ECE3058	Radio Frequency Engineering	3	0	0	3
14	ECE3059	Security in Computer Networks	3	0	0	3
15	ECE3060	Wireless Adhoc Networks	3	0	0	3
16	ECE3061	Optical Communication	3	0	0	3
17	ECE3062	Fundamentals of Wearable Sensing	3	0	0	3
18	ECE3063	Wearable Devices and Its Applications	3	0	0	3
19	ECE3064	Embedded Platforms for Wearables	3	0	0	3
20	ECE3065	RFID and Flexible Sensors	3	0	0	3
21	ECE3066	Wireless Technologies for Wearables	3	0	0	3
22	ECE3067	Wearable Internet of Things (WIoT)	3	0	0	3
23	ECE3068	Embedded Intelligence in WIoT	3	0	0	3
24	ECE3069	Flexible Electronics And Sensors	3	0	0	3
25	ECE3070	AI & Digital Health	3	0	0	3

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26	ECE3071	Wearable and Ubiquitous Computing	3	0	0	3
27	ECE3072	Secure Wearable Internet of Things	3	0	0	3
28	ECE3073	Wearable Prosthetics and Robots	3	0	0	3
29	ECE3074	Applications of Brain Computer Interfaces	3	0	0	3
30	ECE3075	IoT: Architecture and Protocols	3	0	0	3
31	ECE3076	IoT Platforms and Application Development	3	0	0	3
32	ECE3077	Wireless Protocols for IoT	3	0	0	3
33	ECE3078	IoT and Cloud Computing	3	0	0	3
34	ECE3079	Fog Computing	3	0	0	3
35	ECE3080	IoT Edge Nodes and its Applications	3	0	0	3
36	ECE3081	Security and Privacy in Traditional IoT Systems	3	0	0	3
37	ECE3082	Data Science for IoT	3	0	0	3
38	ECE3083	Hardware and Software Architectures for IoT Systems	3	0	0	3
39	ECE3084	Mobile App Development for IoT	3	0	0	3
40	ECE3085	Security and Privacy in Edge Native Solutions	3	0	0	3
41	ECE3086	Industrial Internet of Things (IIoT)	3	0	0	3
42	ECE3087	IoT Robots	3	0	0	3
43	ECE3088	Internet of Medical Things (IoMT)	3	0	0	3
44	ECE3089	Artificial Neural Networks	3	0	0	3
45	ECE3090	Digital System Design using VERILOG	3	0	0	3
46	ECE3091	Mathematical Physics	3	0	0	3
47	ECE3092	Photonic Integrated Circuits	3	0	0	3
48	ECE3093	Machine learning for Music Information Retrieval	3	0	0	3
49	ECE3094	Video Processing and Computer Vision	3	0	0	3
50	ECE3096	Natural Language Processing	3	0	0	3

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Annexure – III

List of B.Tech New Courses introduced

S. No.	COURSE CODE	COURSE NAME	L	T	P	C
1	ECE 601	Foundations of Industrial VLSI Design	2	0	0	2
2	ECE 602	Digital Design and Verification	2	0	0	2
3	ECE 603	Design For Testability	2	0	0	2
4	ECE 604	Physical Design	2	0	0	2
5	ECE 605	Data Science for Engineers	2	0	0	2
6	ECE 606	Electronics Equipment Integration and Prototype Building	2	0	0	2
7	ECE 607	Foundation of Cloud IoT Edge ML	2	0	0	2
8	ECE 608	Fuzzy Logic And Neural Networks	2	0	0	2
9	ECE 609	Digital Design	2	0	0	2
10	ECE 610	Digital Verification	2	0	0	2
11	ECE2009	Digital Computer Fundamentals (For BCA 2022 Batch onwards)	2	0	2	3
12	ECE3006	Digital Control Systems	3	0	0	3
13	ECE3053	Data Communication and Networking (DE from 2022 onwards)	3	0	0	3
14	ECE3089	Artificial Neural Networks	3	0	0	3
15	ECE3095	Blockchain and Cryptocurrency Technolgies	3	0	0	3
16	ECE3097	Smart Electronics in Agriculture	3	0	0	3
17	ECE3098	Environment Monitoring Systems	3	0	0	3
18	ECE3099	Modern Wireless Communication with 5G	3	0	0	3
19	ECE3100	Underwater Communication	3	0	0	3
20	ECE3101	Printed Circuit Board Design	3	0	0	3
21	ECE3102	Consumer Electronics	3	0	0	3
22	ECE3103	Product Design of Electronic Equipment	3	0	0	3
23	ECE3104	Vehicle to Vehicle Communication	3	0	0	3
24	ECE3105	Wavelets and Filter Banks	3	0	0	3
25	ECE3106	Introduction to Data Analytics	3	0	0	3
26	ECE3107	Machine Vision for Robotics	3	0	0	3
27	ECE3110	Internet of Things (IOT) (for BCA)	1	0	4	3

28	ECE3111	Microprocessors and Microcontrollers (for CSE)	3	0	0	3
29	ECE3113	Foundations of Industrial VLSI Design	3	0	0	3
30	ECE3114	Digital Design and Verification	3	0	0	3
31	ECE3115	Physical Design	3	0	0	3
32	ECE3116	Digital Circuit Design	3	0	0	3
33	ECE3117	Digital Verification	3	0	0	3
34	ECE3118	Hardware Security and Trust	3	0	0	3

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Department of Electronics and Communication Engineering

Action Taken Report (ATR) on Alumni Feedback for BTECH received during the AY 2022-2023

Department	Stakeholder	Feedback Received	Action Taken
Electronics and Communication Engineering	Alumni	➢ The alumni opined very good (48.76%) regarding the curriculum is balanced with a requisite number of foundation, core and elective courses. ➢ 29.68% of alumni opined curriculum offers enough flexibility to the students to choose the course ➢ The majority of the students think that they have opined well for the course curriculum fulfilling their expectations (employability skills, entrepreneurial skills) ➢ 41.62% rate very good overall credit structure of the program. ➢ Alumni have opined (about 68.00%) that the curriculum structure looks to be appropriate to develop the necessary skill set and impart the knowledge required for a professional	➢ Suggestions by the alumni were considered. They were included in the new course introduction. ➢ The curriculum has been revised by adding corporate/industry requirements in every area of specialization. This includes projects/assignments, recent developments in every field, etc. ➢ Many new courses have been introduced to need the need of the industry.

As per the feedback received, Course Content Revisions have been made as per Annexure -I and New Courses have been included in Annexure –II.

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Annexure – I

List of B.Tech Courses in which Content Revision

Sr. No	Code	Course Name	L	T	P	C
1	ECE1003	Fundamentals of Electronics	3	0	0	3
2	ECE2007	Digital Design (CSE 2021 Batch Onwards)	2	0	2	3
3	ECE3013	Antenna and Wave Propagation	3	0	0	3
4	ECE3015	Measuring Instruments and Sensors (from 2021 onwards)	3	0	0	3
5	ECE3049	Developing Secure Embedded Systems	3	0	0	3
6	ECE3050	Design for Testability	3	0	0	3
7	ECE3051	Machine Learning and Deep Learning Using FPGAs	3	0	0	3
8	ECE3052	Introduction to Embedded Machine Learning	3	0	0	3
9	ECE3054	Mobile Communication	3	0	0	3
10	ECE3055	Satellite Communication	3	0	0	3
11	ECE3056	Wireless Communication and Networks	3	0	0	3
12	ECE3057	Radar Engineering	3	0	0	3
13	ECE3058	Radio Frequency Engineering	3	0	0	3
14	ECE3059	Security in Computer Networks	3	0	0	3
15	ECE3060	Wireless Adhoc Networks	3	0	0	3
16	ECE3061	Optical Communication	3	0	0	3
17	ECE3062	Fundamentals of Wearable Sensing	3	0	0	3
18	ECE3063	Wearable Devices and Its Applications	3	0	0	3
19	ECE3064	Embedded Platforms for Wearables	3	0	0	3
20	ECE3065	RFID and Flexible Sensors	3	0	0	3
21	ECE3066	Wireless Technologies for Wearables	3	0	0	3
22	ECE3067	Wearable Internet of Things (WIoT)	3	0	0	3
23	ECE3068	Embedded Intelligence in WIoT	3	0	0	3

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24	ECE3069	Flexible Electronics And Sensors	3	0	0	3
25	ECE3070	AI & Digital Health	3	0	0	3
26	ECE3071	Wearable and Ubiquitous Computing	3	0	0	3
27	ECE3072	Secure Wearable Internet of Things	3	0	0	3
28	ECE3073	Wearable Prosthetics and Robots	3	0	0	3
29	ECE3074	Applications of Brain Computer Interfaces	3	0	0	3
30	ECE3075	IoT: Architecture and Protocols	3	0	0	3
31	ECE3076	IoT Platforms and Application Development	3	0	0	3
32	ECE3077	Wireless Protocols for IoT	3	0	0	3
33	ECE3078	IoT and Cloud Computing	3	0	0	3
34	ECE3079	Fog Computing	3	0	0	3
35	ECE3080	IoT Edge Nodes and its Applications	3	0	0	3
36	ECE3081	Security and Privacy in Traditional IoT Systems	3	0	0	3
37	ECE3082	Data Science for IoT	3	0	0	3
38	ECE3083	Hardware and Software Architectures for IoT Systems	3	0	0	3
39	ECE3084	Mobile App Development for IoT	3	0	0	3
40	ECE3085	Security and Privacy in Edge Native Solutions	3	0	0	3
41	ECE3086	Industrial Internet of Things (IIoT)	3	0	0	3
42	ECE3087	IoT Robots	3	0	0	3
43	ECE3088	Internet of Medical Things (IoMT)	3	0	0	3
44	ECE3089	Artificial Neural Networks	3	0	0	3
45	ECE3090	Digital System Design using VERILOG	3	0	0	3
46	ECE3091	Mathematical Physics	3	0	0	3
47	ECE3092	Photonic Integrated Circuits	3	0	0	3
48	ECE3093	Machine learning for Music Information Retrieval	3	0	0	3
49	ECE3094	Video Processing and Computer Vision	3	0	0	3
50	ECE3096	Natural Language Processing	3	0	0	3

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Annexure – II

List of B. Tech New Courses introduced

S. No.	COURSE CODE	COURSE NAME	L	T	P	C
1	ECE 601	Foundations of Industrial VLSI Design	2	0	0	2
2	ECE 602	Digital Design and Verification	2	0	0	2
3	ECE 603	Design For Testability	2	0	0	2
4	ECE 604	Physical Design	2	0	0	2
5	ECE 605	Data Science for Engineers	2	0	0	2
6	ECE 606	Electronics Equipment Integration and Prototype Building	2	0	0	2
7	ECE 607	Foundation of Cloud IoT Edge ML	2	0	0	2
8	ECE 608	Fuzzy Logic And Neural Networks	2	0	0	2
9	ECE 609	Digital Design	2	0	0	2
10	ECE 610	Digital Verification	2	0	0	2
11	ECE2009	Digital Computer Fundamentals (For BCA 2022 Batch onwards)	2	0	2	3
12	ECE3006	Digital Control Systems	3	0	0	3
13	ECE3053	Data Communication and Networking (DE from 2022 onwards)	3	0	0	3
14	ECE3089	Artificial Neural Networks	3	0	0	3
15	ECE3095	Blockchain and Cryptocurrency Technolgies	3	0	0	3
16	ECE3097	Smart Electronics in Agriculture	3	0	0	3
17	ECE3098	Environment Monitoring Systems	3	0	0	3
18	ECE3099	Modern Wireless Communication with 5G	3	0	0	3
19	ECE3100	Underwater Communication	3	0	0	3
20	ECE3101	Printed Circuit Board Design	3	0	0	3
21	ECE3102	Consumer Electronics	3	0	0	3
22	ECE3103	Product Design of Electronic Equipment	3	0	0	3
23	ECE3104	Vehicle to Vehicle Communication	3	0	0	3
24	ECE3105	Wavelets and Filter Banks	3	0	0	3
25	ECE3106	Introduction to Data Analytics	3	0	0	3
26	ECE3107	Machine Vision for Robotics	3	0	0	3

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27	ECE3110	Internet of Things (IOT) (for BCA)	1	0	4	3
28	ECE3111	Microprocessors and Microcontrollers (for CSE)	3	0	0	3
29	ECE3113	Foundations of Industrial VLSI Design	3	0	0	3
30	ECE3114	Digital Design and Verification	3	0	0	3
31	ECE3115	Physical Design	3	0	0	3
32	ECE3116	Digital Circuit Design	3	0	0	3
33	ECE3117	Digital Verification	3	0	0	3
34	ECE3118	Hardware Security and Trust	3	0	0	3

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