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

OFFICE OF DEAN (ACADEMIC AFFAIRS)

Ref.: 907 (C) /Dean (AA)/2023

Date: 09.02.2023

ACADEMIC YEAR 2021-22

Analysis on Feedback from Employers: Action Taken Report

A. The various ways in which feedback from Employers were obtained during the Academic Year 2021-22:

1. Participation in Academic and Statutory meetings viz. Board of Studies (BoS) and School Level Advisory Committee (SLAC) during December 2021 – January 2022 and June – August 2022 and Academic Council meetings.

2. Feedback from Institution Website

Based on the analysis of feedback, the following points were taken for further course of action in the Academic Year 2021-22:

❖ S1: Modification / revision in syllabi of courses to suit the industrial demand and to enhance the current knowledge levels of the students.

❖ S2: Introduction of new courses in the emerging technologies

❖ S3: Starting new programmes based on market demand

❖ S4: Emphasize application oriented curriculum and syllabi of computer applications courses.

B. Details of Action Taken

○ S 1 & S2 was considered as major revision of curriculum & syllabi of UG Engineering, Arts & Science and MBA programmes under Regulations 2021. New elective courses related to industrial demands, knowledge enhancement and cutting edge technologies were introduced.

The sample agenda items emphasizing S1 and S2 were deliberated in the 18th meeting of Academic Council which was held on 24th February 2022, vide agenda item no. 18.11.1, 18.12.1, 18.14.1 ,18.14.2 ,18.14.3, 18.14.4, 18.14.5, given in   (Page No. 57, 59 64, 68 to 73 of minutes of 18th Academic Council meeting) S2 was considered as agenda items 19.8.3, 19.9.3, 19.9.1, 19.10.1, 19.10.2 in the 19th meeting of Academic Council held on 29.9.22 (Page no. 37 to 88 in the minutes of 19th Academic Council meeting)

○ S3: considering the diversity, market demands, industry trends and societal needs, four new programmes viz., B.A. English, B.Com. Professional Accounting, M.Pharm., and LL.M. (Criminal Law) were introduced from the academic year 2022 – 23 vide page number 21, agenda item no.18.1.4 in the 18th meeting of Academic Council held on 24.2.22.

○ S4 was considered as agenda item 19.12.1,19.8.4, 19.8.5, in the 19th meeting of Academic Council held on 29.9.22

Annexure: Highlighted pages of Minutes of 18th and 19th Academic Council meeting.

9.2.23

Dean, Academic Affairs

DEAN (ACADEMIC AFFAIRS)
B.S. Abdur Rahman Crescent Institute
of Science & Technology
Vandalur, Chennai - 600 048, India

Minutes of the

Eighteenth meeting of the Academic Council

of

B.S. Abdur Rahman Crescent Institute of Science and Technology

held on

February 24, 2022

Online Meeting

- Programmes with emphasize for residential learning

The application for off-campus was submitted to UGC / Ministry of Education and is in progress.

The academic council may consider and note the same.

Discussions:

Prof. Jagadeesh Kumar suggested that the Madurai off-campus can be branded as "B.S. Abdur Rahman Crescent Institute of Science and Technology – Madurai campus" for good visibility.

Resolution:

The agenda item was noted.

Item 18.1.4

.   **To consider and note the starting of new programmes and withdrawal of few programmes in the academic year 2022-23 in the B.S. Abdur Rahman Crescent Institute of Science and Technology, Main Campus.**

Note on Agenda:

Considering the diversity, market trends, industry demand and societal needs, the following programmes are introduced from the academic year 2022-23:

1. M.Pharm. (Pharmaceutics)
2. LLM (Criminal Law)
3. B.Com. Professional Accounting
4. B.A. English

The following programmes are discontinued from the academic year 2022-23 due to lack of patronage:

1. B.A. English (Hons.)
2. M.Tech. Data Science

The introduction of new programmes and discontinuation of few programmes were deliberated in the 21st meeting of Board of Management, which was held on 10.01.2022 and got approved for implementation.

The academic council may consider and note the same.

Discussions:

Prof. Shakeel Ahmad suggested exploring the possibilities of offering more online programmes by following the guidelines of UGC in the near future.

SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Item 18.11

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

Item 18.11.1

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

Note on Agenda:

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

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

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

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

a) New Courses introduced:

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

b) Courses with Syllabus revision:

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

Item 18.11.2

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

Note on Agenda:

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

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

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

Resolution:

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

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Item 18.12

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

Item 18.12.1

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

Note on Agenda:

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

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

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

Item 18.14.1

To consider and approve the syllabi (III & IV semester) courses of B.Tech. Computer Science and Engineering; B.Tech. CSE (Internet of Things); B.Tech. CSE (Cyber Security) and B.Tech. (Artificial Intelligence and Data Science)under Regulations 2021.

Note on Agenda:

The major revision in curriculum of B.Tech. Computer Science and Engineering; B.Tech. CSE (Internet of Things); B.Tech. CSE (Cyber Security) and B.Tech. (Artificial Intelligence and Data Science)under R 2021 and Syllabi of I & II Semester courses of these programmes was approved in the 17th meeting of Academic Council and accordingly implemented from the year AY 2021-2022.

In the 19th meeting of Board of Studies of Department of Computer Science & Engineering which was held on 28.12.2021, the syllabi of III & IV Semester Courses of B.Tech. Computer Science and Engineering; B.Tech. CSE (Internet of Things); B.Tech. CSE (Cyber Security) and B.Tech. (Artificial Intelligence and Data Science) were deliberated. After deliberations the board has recommended the same for approval in the Academic Council.

The salient features of the B.Tech. Computer Science and Engineering; B.Tech. CSE (Internet of Things); B.Tech. CSE (Cyber Security) and B.Tech. (Artificial Intelligence and Data Science) curriculum under R 2021 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' are as follows:

I. B.Tech. Computer Science and Engineering R 2021

a) Semester I & II (AY 2021-2022)

i) New Courses Introduced:

Sl. No.	Course Code	Course Title	Credits
1	CSD 1101	Programming for Problem Solving	2
2	CSD 1201	Object Oriented Programming	3

b)Semester III & IV (AY 2022-2023)

i) New Courses (Proposed)

Sl. No.	Course Code	Course Title	Credits
1.	CSD 2101	Python Programming	3
2.	CSD 2105	Python Programming Laboratory	1

the board has recommended the same for approval in the Academic Council.

i. B.Tech. (Artificial Intelligence and Data Science) – New Elective Courses

Course Code	Course Name	Credits
CSCX 501	IoT Architecture and Protocol	3
CSCX 502	Intelligent Information Retrieval	3
CSCX 503	Digital Image Processing	3
CSCX 504	Advanced Python for Data science	3
CSCX 505	Web and Social Media Mining	3
CSCX 506	Statistics for Business Analytics	3
CSCX 507	Automata Theory	3
CSCX 508	Web and Social Media Analytics	3
CSCX 509	Advanced Artificial Intelligence Systems	3
CSCX 510	Cognitive Analytics	3
CSCX 511	Secure Cloud Computing	3
CSCX 512	Security Risk Assessment and Management	3
CSCX 513	Information Security	3
CSCX 515	Cyber Crime and Computer Ethics	3
CSCX 516	Secure Web App	3

ii. B.Tech. CSE (Cyber Security) – New Elective Courses

Course Code	Course Name	Credits
CSC X 301	Agile Software Development	3
CSC X 303	Malware Analysis	3
CSC X 305	Secure Software Development Life Cycle	3
CSCX 302	Multimedia security	3
CSC X 407	Cyber Crime Investigation and Digital Forensics	3
CSC X 408	Information Security Intelligence and Compliance Analytics Using Big Data	3

CSC X 409	Penetration Testing and Vulnerability Assessment	3
CSC X 410	legal Issues in Information Assurance	3
CSC X 411	Secure Electronic Commerce	3
CSC X 412	Cloud Security	3
CSC X 306	Block Chain & Crypto currency Technology	3
CSC X 307	Security in Industry 4.0	3
CSC X 308	Security Governance, Risk and compliance	3
CSC X 309	Operating System Security	3
CSC X 310	Android Security	3
CSC X 311	Security in Smart devices	3
CSC X 312	Cognitive Psychology in Cyber Security	3

The syllabi of the elective courses of B.Tech. (Artificial Intelligence and Data Science) and B.Tech. CSE (Cyber Security) under R 2017 are given in **Annexure 18.14.2(a) &18.14.2(b)**.

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

Resolution:

After deliberations, the agenda item was approved.

Item 18.14.3

To consider and approve the syllabi (II semester) of M.Tech. (Artificial Intelligence and Data Science) under Regulations 2019.

Note on Agenda:

The curriculum and syllabi of I semester M.Tech. (Artificial Intelligence and Data Science) was approved in the 17th meeting of Academic Council and accordingly implemented from the year AY 2021-2022.

In the 19th meeting of Board of Studies of Department of Computer Science & Engineering which was held on 28-12-2021, the syllabi of II semester courses of M.Tech. (Artificial Intelligence and Data Science) were deliberated. After deliberations the board has recommended the same for approval in the Academic Council.

The salient features of the M.Tech. (Artificial Intelligence and Data Science) curriculum under R 2019 are as follows:

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

a) New Courses introduced:

S.No.	Course Code	CourseTitle	Credit
1.	CSD 6121	Advanced Data Structures	3
2.	CSD 6122	Artificial Intelligence in Data Mining	4
3.	CSD 6123	Essentials of Artificial Intelligence and Machine Learning	3
4.	CSD 6144	Data Science Foundations using R	4
5.	CSD 6221	Natural Language Processing	3
6.	CSD 6222	Deep Learning	4
7.	CSDY 301	SQL for Data Science	3
8.	CSDY 303	Exploratory Data Analytics	3
9.	CSDY 351	Business Intelligence	3
10.	CSDY 306	Soft Computing Techniques	3
11.	CSDY 307	Artificial Neural Networks	3
12.	CSDY 308	Knowledge Engineering and Expert Systems	3
13.	CSDY 309	Scripting languages	3
14.	CSDY 310	Distributed, Parallel and Spatial Databases	3
15.	CSDY 311	Data Visualization	3
16.	CSDY 353	Optimization methods for Analytics	3
17.	CSDY 354	Knowledge Representation and Reasoning	3
18.	CSDY 355	Data Science with Bio Informatics	3
19.	CSDY 359	Web Analytics	3

The curriculum and syllabi of M.Tech. (Artificial Intelligence and Data Science) under R 2019 are given in **Annexure 18.14.3.**

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

Resolution:

> After deliberations, the agenda item was approved.

Item 18.14.4

> **To consider and approve the syllabi of the elective courses offered to B.Tech. EEE under Regulations 2021.**

Note on Agenda:

> The syllabi of elective courses offered to B.Tech. EEE under R2021 were deliberated in the 19th meeting of Board of Studies of Department of Computer Science & Engineering held on 28-12-2021. After deliberations, the board has recommended the same for approval in the Academic Council.

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B.Tech. EEE R2021 - Elective Courses

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> i   CSDX 81 – Introduction to Cloud Computing
> ii   CSDX 82 – Computer Hardware and Interfacing
> iii CSDX 83 – Computer Networks
> iv   CSDX 84 – Fundamentals of Data Structures
> v   CSDX 85 – Java Programming

> The syllabi of elective courses offered to B.Tech. EEE under R 2021 are given in **Annexure 18.14.4**.

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

Resolution:

> After deliberations, the agenda item was approved.

Item 18.14.5

> **To consider and approve the syllabi of the courses offered to B.Tech. EIE under Regulations 2021.**

Note on Agenda:

> The syllabi of courses offered to B.Tech. EIE under R2021 were deliberated in the 19th meeting of Board of Studies of Department of Computer Science & Engineering held on 28-12-2021. After deliberations, the board has recommended the same for approval in the Academic Council.

> **B.Tech. EIE R2021 - Elective Course**
> i EID 2204 - Python for Instrumentation Engineers
> ii EID X62 - R Programming

> The syllabi of elective courses offered to B.Tech. EIE under R 2021 are given in

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

Resolution:

After deliberations, the agenda item was approved.

DEPARTMENT OF INFORMATION TECHNOLOGY

Item 18.15

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

Item 18.15.1

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

Note on Agenda:

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

In the 15th meeting of Board of Studies of Department of Information Technology which was held on 16.12.2021, the syllabi of III & IV Semester Courses were deliberated. After deliberations the board has recommended the same for approval in the Academic Council.

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

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

  a) New Courses introduced:

Course Code	Course Title	Credits
ITD 1201	Programming in C++	3

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

  a) New Courses Proposed:

Course Code	Course Title	Credits
ITD 2104	Data Structures and Algorithms	3

ITD 2106	Data Structures and Algorithms Lab	1
ITD 2201	Programming in Java	3
ITDX 03	Principles of Programming Languages	3
ITDX 04	Graphics and Multimedia	3
ITDX 05	Human Computer Interaction	3

b) Courses with Syllabus Revision (Proposed):

Course Code	Course Title	Credits	Revision (%)
ITD 2102	Programming in Python	3	20%
ITD 2103	Computer Architecture	3	20%
ITD 2105	Fundamentals of Web Designing	3	40%
ITD 2202	Database Management System	4	20%
ITD 2203	Computer Networks	4	20%
ITD 2204	Software Engineering	3	24%
ITD 2205	Operating Systems	4	20%
ITDX 02	Android Application Development	3	40%
ITDX 26	Principles of Communication	3	20%

The curriculum and syllabi of the courses (III & IV Semester) of B.Tech. IT under R 2021 are given in **Annexure 18.15.1.**

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

Resolution:

After deliberations, the agenda item was approved.

DEPARTMENT OF COMPUTER APPLICATIONS

Item 18.16

To consider and approve the recommendations of the Board of Studies of the Department of Computer Applications.

Item 18.16.1

To consider and approve the revised curriculum and syllabi (III & IV semester) of BCA under Regulations 2021.

Note on Agenda:

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

In the 16th meeting of Board of Studies of the Department of Computer Applications, which was held on 23rd December 2021, revision in curriculum and the syllabi of III and IV semester courses were deliberated. After deliberations, the board has recommended the same for approval in the Academic Council.

In the curriculum, under IV Semester technology elective courses, the course 'CADX 204 – Web Design and Development' was replaced by the course 'Web Technology'.

Based on industry needs, we are replacing the following course:

CADX 204 - Web Design and Development

CADX 208 - Web Design Laboratory in semester IV of BCA

As New Course:

CADX 204 - Web Technology

CADX 208 - Web Technology Laboratory in semester IV of BCA

The introduction of new specializations viz. (i) Cyber security and (ii) Artificial Intelligence in the BCA under R 2021 was also deliberated and approved by the board of studies.

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

I. Semester I and II (AY 2021-2022)

a) Courses with Syllabus Revision:

Course Code	Course Title	Credits	Revision (%)
Core Courses			
CAD 1101	Computer Fundamentals and Organization	3	40%
CAD 1102	Programming in C	3	30%
CAD 1103	Data Structures	3	20%
CAD 1201	OOPS with C++	3	30%
CAD1202	Operating Systems	3	40%
Laboratory Courses			
CAD 1104	Programming in C Laboratory	2	30%