Internal Quality Assurance Cell

Structured Feedback Analysis & Action Taken Report

On

Curriculum Revision

FEEDBACK ANALYSIS

(The Structured Feedback on Curriculum is collected from all relevant stakeholders and is submitted to the Departmental Quality Assurance Cell (DQAC) to analyze and deliberate on various suggestions made by the stakeholders and put up an action plan. A detailed report has to be submitted in the office of the Head of the Department. Following is the notification (via Email) of DQAC meeting and its minutes.)

Department of Computer Science and Engineering

NOTICE

A meeting of the DQAC of Department of Computer Science and Engineering is schedule to be held on 5th July 2022 in the DQAC Room to discuss following agenda items. All members are requested to make it convenient to attend.

Agenda: Analysis of Feedback Report (Session 2021-22) for all programs offered by the department.

HOD
CSE Department
Integral University

Head
Department of Computer Science & Engineering
Integral University, Lucknow

Department of Computer Science and Engineering

Minutes of the Meeting of DQAC

Agenda: Analysis of Feedback (Session 2021-2022) for all programs offered by the department.

Date: 5th July 2022

Venue: DQAC **Time: 11:30 AM**

S.No.	Name	Position
1.	Ms. Kavita Agrawal	Chairperson
2.	Dr. Shish Ahmad	Member
3.	Dr. Mohd Haroon	Member
4.	Dr. M M Tripathi	Member
5.	Dr. Mohd Arif	Member
6.	Dr. Jameel Ahmad	Member
7.	Dr. Halima Sadia	Member
8.	Dr. Faiyaz Ahmad	Member
9.	Dr. Shashank Singh	Member
10.	Mr. Anwar Ahmad Sheikh	Member
11.	Mr. Afsaruddin	Member
12.	Mr. Aftab Yaseen	Member
13.	Dr. Sheeba Parveen	Member
14.	Mr. Kamlesh Chandra Maurya	Member
15.	Dr. Mohd. Zunnun Khan	Member
16.	Dr. Mohammad Akbar	Member
17.	Dr. Mohammad Suaib	Member
18.	Mr. Mohd Usman Khan	Member
19.	Ms. Roshan Jahan	Member
20.	Ms. Ankita Srivastava	Member
21.	Mr. Ijtaba Saleem Khan	Member
22.	Ms. Nudrat Fatima	Member
23.	Dr. Sifatullah Siddiqi	Member
24.	Ms. Saleha Mariyam	Member
25.	Dr. Syed Haider Abbas	Member
26.	Mr. Manish Rajput TCS (External member)	External Member

Members Excused:

S.No.	Member Name	Designation	Reason
NA			

Members Absent:

S.No.	Name	Designation	Reason
NA			

Meeting Agenda details:

1. Discussion on all stakeholders' feedback on curriculum revision.

2. Preparation of detailed Feedback Analysis Report for all programs offered.
3. Preparation of Action Plan against suggested responses.

Meeting Minutes:

After due discussions and deliberations following decisions were taken.

1. The collective feedback of all the stakeholders was analysed and a consolidated report of the recommendations was prepared. Feedback was taken against eight questions. The first seven questions have been rigorously designed to capture the qualitative characteristics of the curriculum and its enrichment. The last question is a subjective question which captures the suggestions of the stakeholders. The questions recorded stakeholder views against professional competencies, sequencing of the content, adequacy of syllabi coverage & credit allocation, adequateness of textbooks and reference materials, syllabus in terms of active engagement of students, depth of the syllabus with respect to industry/global scenarios, and suggestion by the stakeholder.
2. The stakeholders have recorded positive feedback and have shown satisfaction regarding the proposed curriculum. The responses have been collated and the suggestions and necessary action plan for revisions/ additions in the syllabi are captured in the feedback analysis report.
3. The Feedback Analysis Report is enclosed and submitted for necessary action.
4. Meeting ended with thanks to chair

(DQAC Chairman)

(HOD)

Head
Department of Computer Science & Engineering
Integral University, Lucknow

Internal Quality Assurance Cell

Department of Computer Science and Engineering

Feedback Analysis Report

**B.Tech. Computer Science & Engineering, B.Tech. Computer Science & Engineering specialization in Cloud Technology & Information Security, M.Tech. Computer Science & Engineering, M.Tech. Computer Science & Engineering specialization in ACDS*

Feedback by Students: *(Dept. of Computer Science & Engineering)*

The categorization of rating based on average score of different parameters is as follows:

S. No.	Question	Responses (in terms of %)				Average Score out of 4	Ratings
		Excellent (4)	Very Good (3)	Moderate (2)	Poor (1)		
1.	Professional Competencies : The syllabi/ courses are able to achieve the intended outcomes	75	25	-	-	3.8	Excellent
2.	Rate the sequencing of the contents in the syllabi/ courses	75	25	-	-	3.8	Excellent
3.	Rate the adequacy of coverage and credit allocation in syllabi/courses	67	33	-	-	3.7	Excellent
4.	Rate the adequacy of textbooks and reference materials mentioned in syllabi	75	25	-	-	3.8	Excellent
5.	Rate the syllabi content in terms of active engagement of the students	75	25	-	-	3.8	Excellent
6.	Rate the depth of the syllabus for the course in relation to the competencies expected by industry/global scenarios	67	25	8	-	3.6	Excellent
7.	The syllabi/course will help in adding competitiveness among learners and helps in carrier progression	75	25	-	-	3.8	Excellent

*Excellent >3 *Very Good >2 *Moderate>1 * Poor<=1

Text Suggestions:

- Introduction, revision, and/or modification of the study and evaluation scheme to make certain elective courses as departmental core subjects, as there is a need to study them for GATE, NET, and also because there is a technological need for the same.
- New subjects like Green Computing and Human Computer Interactions should be implemented for the coming semesters and sessions.
- Introduction of new practical courses based on industry trends.
- Include Sci Lab in course content.
- Include Hadoop Fundamentals lab in B.Tech Specialised courses.
- Organizing workshops, guest lectures and seminars related to the current trends of computer science and engineering.
- Active interactions with industry personal are requested to bring help the students for better career prospective.

Analysis of Feedback:

The Student's responses to the proposed changes in the curriculum against different parameters were analysed. Based on their feedback the following points were captured.

- 85% of the students rated the curriculum "Excellent" with respect to professional competencies, intended outcomes, sequencing of the contents, adequacy of textbooks and reference materials mentioned in syllabi, and will add competitiveness through active engagement among learners and will also helps in carrier progression. 25% rated it to be very good.
- Only 6% of the students rated **moderate** for the depth of the syllabus in relation to the competencies expected by industry/global scenarios.

Action Plan:

The analysis suggests that students wanted more focus on practical learning. This can be improved by introducing more practical subjects and other industry-based trending technologies to be taught and introduced in course curriculum. So, more practical experiments will be included in the syllabi for improving competencies.

Feedback by Teachers: *(Dept. of Computer Science & Engineering)*

The categorization of rating based on average score of different parameters is as follows:

S. No.	Question	Responses (in terms of %)				Average Score out of 4	Ratings
		Excellent (4)	Very Good (3)	Moderate (2)	Poor (1)		
1.	Professional Competencies: The syllabi/ courses are able to achieve the intended outcomes	78	-	22	-	3.6	Excellent
2.	Rate the sequencing of the contents in the syllabi/ courses	78	22	-	-	3.8	Excellent
3.	Rate the adequacy of coverage and credit allocation in syllabi/courses	75	25	-	-	3.8	Excellent
4.	Rate the adequacy of textbooks and reference materials mentioned in syllabi	56	32	12	-	3.4	Excellent
5.	Rate the syllabi content in terms of active engagement of the students	45	33	22	-	3.2	Excellent
6.	Rate the depth of the syllabus for the course in relation to the competencies expected by industry/global scenarios	67	33	-	-	3.7	Excellent
7.	The syllabi/course will help in adding competitiveness among learners and helps in carrier progression	73	20	-	7	3.6	Excellent

*Excellent >3 *Very Good >2 *Moderate>1 * Poor<=1

Text Suggestions:

- More innovative and technology based teaching-learning methods should be adopted to teach the courses.
- More reference book and text books should be included in the syllabi.
- AI Analyst Lab and Cloud Development Lab to be included in Advance specialised branches of B.Tech which will help students for better understanding.
- Installation of new software for more practical approach.
- IOT lab and Data Analytics Lab to be implemented in the department
- We need to introduce courses more aligned to UNSDG.
- Use of ICT should be encouraged for learners through modern pedagogy approach eg; use of LMS and DMS, recorded lectures etc.
- Value added courses should also include topics related to new technological advancements.

Analysis of Feedback:

The Teacher's response to the proposed changes in the curriculum against different were recorded and analysed. Based on their feedback the following points were captured.

- Majority of teachers rated the various factors as excellent and very good.
- For the parameters where moderate and poor ratings were recorded, following action plan are proposed.

Action Plan:

- More industry expert guest lectures to be organised in the department for students for making them industry ready.
- The syllabi should be modified according to the advance technologies and topics that is needed for enhanced active engagement.
- Recent researches to be included as reference.
- IOT labs and Data Analytics labs needs to be setup.
- More Value-Added courses to be designed based on the new technologies.

Feedback by Alumni: *(Dept. of Computer Science & Engineering)*

The categorization of rating based on average score of different parameters is as follows:

S. No.	Question	Responses (in terms of %)				Average Score out of 4	Ratings
		Excellent (4)	Very Good (3)	Moderate (2)	Poor (1)		
1.	Professional Competencies : The syllabi/ courses are able to achieve the intended outcomes	77	23	-	-	3.8	Excellent
2.	Rate the sequencing of the contents in the syllabi/ courses	45	33	22	-	3.2	Excellent
3.	Rate the adequacy of coverage and credit allocation in syllabi/courses	57	18	17	8	3.2	Excellent
4.	Rate the adequacy of textbooks and reference materials mentioned in syllabi	57	31	12	-	3.5	Excellent
5.	Rate the syllabi content in terms of active engagement of the students	63	20	17	-	3.5	Excellent
6.	Rate the depth of the syllabus for the course in relation to the competencies expected by industry/global scenarios	69	30	1	-	3.7	Excellent
7.	The syllabi/course will help in adding competitiveness among learners and helps in carrier progression	82	18	-	-	3.8	Excellent

*Excellent >3 *Very Good >2 *Moderate>1 * Poor<=1

Text Suggestions:

- Labs should focus more on logic building in programming.
- Syllabus should adapt the advancement and modifications to the technology and trends to keep the learning up to date.
- The syllabus should be revised for development of entrepreneurship skills.
- Engagement of teacher and students must be there to make the course more valuable.
- Please stop the use of turbo C++ in the labs and switch to visual code studio for C programing. Better yet, allow students to choose the IDE which suits them best.
- Capstone projects should be mandatory.
- The introduction of python is a great initiative, we can also include data science and analytics.
- Kindly add Green Computing, and also add Hadoop systems in course curriculum.
- Revise the syllabi according to current industry needs.

Analysis of Feedback:

The Alumni response to different parameters with regards to relevance of syllabi, content of the curriculum against student placement, employability, and progression to higher studies were recorded and analysed. Based on their feedback the following points were captured.

- A majority of alumni rated the various parameters as excellent and very good.
- For the parameters where moderate and poor ratings were recorded following action plan is proposed.

Action Plan:

- For the adequacy of course revision and its relevance in current industry needs, the course will be revised with the advice of the statutory body committee members.
- The practicality of the syllabi shall be enhanced for active engagement.
- Recent survey and field work should also be discussed.

Feedback by Employer: *(Dept. of Computer Science & Engineering)*

The categorization of rating based on average score of different parameters is as follows:

S. No.	Question	Responses (in terms of %)				Average Score out of 4	Ratings
		Excellent (4)	Very Good (3)	Moderate (2)	Poor (1)		
1.	Professional Competencies : The syllabi/ courses are able to achieve the intended outcomes	81	10	-	9	3.6	Excellent
2.	Rate the sequencing of the contents in the syllabi/ courses	48	30	22	-	3.3	Excellent
3.	Rate the adequacy of coverage and credit allocation in syllabi/courses	67	33	-	-	3.7	Excellent
4.	Rate the adequacy of textbooks and reference materials mentioned in syllabi	63	37	-	-	3.6	Excellent
5.	Rate the syllabi content in terms of active engagement of the students	79	19	-	-	3.7	Excellent
6.	Rate the depth of the syllabus for the course in relation to the competencies expected by industry/global scenarios	75	25	-	-	3.8	Excellent
7.	The syllabi/course will help in adding competitiveness among learners and helps in carrier progression	83		17	-	3.7	Excellent

*Excellent >3 *Very Good >2 *Moderate>1 * Poor<=1

Text Suggestions:

- Programming should be more focused than the theory part, to make students ready for the corporate.
- A great initiative, if this comes into effect.
- Curriculum has relevance to real life situations; reflects current trends and practices in the respective disciplines.
- Organizing workshops, guest lectures and seminars related to the current trends of computer science and engineering.
- Introduce Skill Development Centre.
- Exposure to Cloud, background of Predictive analytics along with machine learning would be helpful.
- You can focus more on collaboration with Industry and design as per current requirements.

Analysis of Feedback:

The Employer's responses to different parameters were recorded and analysed. Based on their feedback the following points were captured.

- A majority of Employer rated the various parameters as excellent and very good.
- For the parameters where moderate and poor ratings were recorded following action plan is proposed.

Action Plan:

- The adequacy of coverage and credit allocation in syllabi/courses, Professional Competencies to achieve the intended outcomes and adding competitiveness among learners will be revisited with the advice of the statutory body's committee members.
- The practicality of the syllabi shall be enhanced for active engagement.
- Recent technological changes to be included in the course curricula.

Feedback by Parents: *(Dept. of Computer Science & Engineering)*

The categorization of rating based on average score of different parameters is as follows:

S. No.	Question	Responses (in terms of %)				Average Score out of 4	Ratings
		Excellent (4)	Very Good (3)	Moderate (2)	Poor (1)		
1.	Professional Competencies : The syllabi/ courses are able to achieve the intended outcomes	70	18	-	12	3.5	Excellent
2.	Rate the sequencing of the contents in the syllabi/ courses	59	21	20	-	3.4	Excellent
3.	Rate the adequacy of coverage and credit allocation in syllabi/courses	60	40	-	-	3.6	Excellent
4.	Rate the adequacy of textbooks and reference materials mentioned in syllabi	68	-	32	-	3.4	Excellent
5.	Rate the syllabi content in terms of active engagement of the students	84	16	-	-	3.8	Excellent
6.	Rate the depth of the syllabus for the course in relation to the competencies expected by industry/global scenarios	76	24	-	-	3.8	Excellent
7.	The syllabi/course will help in adding competitiveness among learners and helps in carrier progression	45	33	22	-	3.2	Excellent

*Excellent >3 *Very Good >2 *Moderate>1 * Poor<=1

Text Suggestions:

- Aware the students regarding placement weekly
- Curriculum should focus more on employability and has relevance to real life situations; reflects current trends and practices in the respective disciplines.
- Introduce more practical labs.
- You can focus more on bringing company experts and interaction with the students will help them get motivated.

Analysis of Feedback:

The Parents responses to different parameters were recorded and analysed. Based on their feedback the following points were captured.

- A majority of Parents rated the various parameters as excellent and very good.
- For the parameters where moderate and poor ratings were recorded following action plan is proposed.

Action Plan:

- More Industry Professional guest lectures and workshops to be organised for achieving competitiveness.
- The practicality of the syllabi shall be enhanced for active engagement.
- Recent advancements in the courses related to industry needs to be included.

Internal Quality Assurance Cell

Department of Computer Science and Engineering

Action Taken Report

**B.Tech. Computer Science & Engineering, B.Tech. Computer Science & Engineering specialization in Cloud Technology & Information Security, M.Tech. Computer Science & Engineering, M.Tech. Computer Science & Engineering specialization in ACDS*

(A detailed report on Feedback Analysis and Action Plan was prepared and submitted by the DQAC members in the office of the Head of the Department of Computer Science and Engineering on 5th July 2022. *The MoM of the Feedback Analysis is also attached.)*

A meeting of the departmental DQAC members was held on 5th July 2022. In this meeting the feedback analysis report submitted on 5th July 2022 was discussed. After intense deliberations, the DQAC made the following recommendations as the Action Taken Report which was submitted to the BOS committee for further decision on revision and or addition of proposed syllabi. The following proposals were made in the meeting:

(Department of Computer Science and Engineering)

- The members discussed and approved introduction of the following new courses in 5th, 6th, and 7th semester B.Tech. CSE, to be effective from academic year 2021-22 (of 2019-20 admitted students onwards) :
  Introduction to Internet of Things (CS341)
  Visual Programming Lab (CS343)
  Advance Computer Architecture (CS-345)
  Green Computing (CS347)
  Human Computer Interaction (CS348)
  SciLab (CS424)
- The members discussed and approved introduction of the following new courses in 4th, 5th, and 6th semester of B.Tech. CSE specialization in CC&AI and DS&AI in association with IBM:
  Cloud Application Development (CS-261)
  Cloud Application Development Lab (CS-266)
  Hadoop Fundamentals (CS-391) .
  Data Science and Use cases (CS-392)
  Hadoop Fundamentals Lab (CS-393)
  Predictive Analytics (CS-395)
  Artificial Intelligence Analyst (CS-394)
  AI Analyst Lab (CS-396)
- To revise the marking scheme of 3rd, 4th, 5th, 6th, 7th, and 8th semester of B.Tech. CSE to be effective from academic year 2021-22 onwards.
- To revise the marking scheme of 3rd, 4th, 5th, 6th, 7th, and 8th semester of B.Tech. CSE specialization in CTIS-iNurture, to be effective from academic year 2021-22.
- To put for approval the evaluation scheme of 3rd and 4th semester of B.Tech. CSE specialization in CTIS to be effective from academic year 2021-22.
- To put for approval the evaluation scheme of 4th, 5th, and 6th semester of B.Tech. CSE specialization in CC&AI in association with IBM and B.Tech. CSE specialization in DS &AI in association with IBM.
- To revise the marking scheme of 3rd and 4th semester of M.Tech. CSE, M.Tech. CSE specialization in ACDS and M.Tech. CSE specialization in SE to be effective from academic year 2021-22 onwards.
- Change in course code of the following courses:

Software Engineering (CS-211 to CS-340)
Data Compression (CS-416 to CS-342)
Concepts in Advanced Database System (CS-414 to CS-346)

- The following Value-Added courses are being introduced:
  - CSV01-Advanced Java and Web Technologies
  - CSV02- Ethical Hacking
  - CSV03-Learning Major Components of Web Designing
  - CSV04-Java for Beginners
  - CSV05-Internet of Things
  - CSV06-Introduction to Cloud Computing with Microsoft Azure
- Departmental internship program proposed for the students (except those who join internship in external organization) in this session has been discussed and approved by BOS
  - CSET04 Python: Tools and project development
  - CSET05 Web Development
  - CSET06 Mobile Application Development

Based on the expert comments of the BOS members, the committee approved all the reports/agenda items and recommended it for further approval in the FB and AC.

Name & Signature
(Head of the Department)

Head
Department of Computer Science & Engineering
Integral University, Lucknow