Department of Computer Science

Curriculum Feedback Analysis and Action Taken Report

AY 2020-21

CHRIST (Deemed to be University), Bangaluru – 29.
Karnataka, India
www.christuniversity.in

About the Department

Department of Computer Science of CHRIST (Deemed to be University) strives to shape outstanding computer professionals with ethical and human values to reshape nation's destiny. The training imparted aims to prepare young minds for the challenging opportunities in the IT industry with a global awareness rooted in the Indian soil, nourished and supported by experts in the field.

Vision and Mission

Vision: The Department of Computer Science endeavours to imbibe the vision of the University "Excellence and Service". The department is committed to this philosophy which pervades every aspect and functioning of the department.
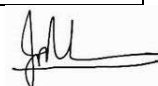
Mission: To develop IT professionals with ethical and human values. To accomplish our mission, the department encourages students to apply their acquired knowledge and skills towards professional achievements in their career. The department also moulds the students to be socially responsible and ethically sound.

Curriculum Feedback Process

At the end of the every Academic Year, the feedback will be taken from all the stake holders to enhance the quality of education with effective curriculum structure to cater the needs of all the stakeholders. The stakeholders were requested to submit their feedback based on the criterion as mentioned below with a rating scale of 5.Excellent 4.Good 3.Satisfactory 2.Averag and 1.Needs to Improve. In addition, the suggestions for the curriculum enrichment were also collected.

Student Feedback

SNO	CRETERION
1	Does the content of the curriculum satisfy the stated objectives and learning outcomes?
2	Does the curriculum cover advanced topics?
3	Whether the curriculum enhances your knowledge and skills in the relevant domain?
4	Is the curriculum effective in developing critical/ analytical thinking?
5	Are the text books and reference materials relevant to the content of the curriculum?
6	Does the curriculum orient towards higher education?
7	Does the curriculum enable the students to apply their knowledge in real life situations?
8	Is employability given weightage in the design and development of curriculum?
9	Does the curriculum promote self-study and attitude of research?
10	Does the curriculum meet your overall expectations?

Faculty Feedback

SNO	CRETERION
1	Does the curriculum satisfy the stated objectives and learning outcomes?
2	Do you have continuous processes to propose, modify, suggest and incorporate new topics in the curriculum?
3	Is the curriculum effective in developing independent thinking?
4	Does the departmental level expert committee meet to review the curriculum?
5	Does the curriculum enhance your knowledge in the subject area?
6	Does the curriculum enable the students to apply their knowledge in real life?
7	Does the curriculum demand the teachers for research inclusive teaching?

Alumni Feedback

SNO	CRETERION
1	Is the curriculum updated on a regular basis depending on the current trends and advanced topics?
2	Does the curriculum orient the students towards higher education?
3	Does the curriculum provide employability weightage?
4	Does the curriculum meet the expectations of the industry?
5	Does the curriculum enable the student to connect the knowledge to real life application?
6	Does the curriculum encourage entrepreneurship?
7	Do you think that the curriculum motivates the students for research and development?

Industry Feedback

| SNO	CRETERION
1	Is the curriculum aligned with the objectives of the programme?
2	Does the curriculum cover advanced topics and current trends?
3	How would you rate the relevance of the electives offered in the curriculum?
4	Is employability given weightage in the design and development of curriculum?
5	Does the curriculum meet the expectations of the industry?
6	Does the curriculum cater to the enhancement of skills of the students with respect to the industry needs?

Feedback Analysis Report for the AY 2020-21

To facilitate the feedback process, the above questions were included in a Google form and sent to the stakeholders to submit their responses with suggestions.

Students Feedback:

The following graph shows the responses received from the 309 students of all the UG and PG programmes of the department.
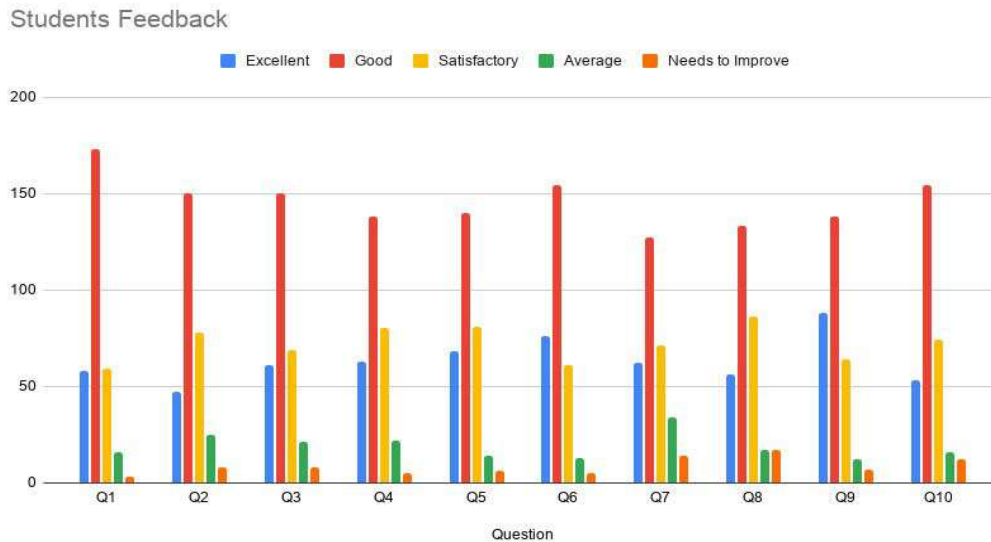
The responses were mentioned as number of students based on their rating assigned to different questions. From the responses, the majority of the students expressed that the curriculum is good to enhance their employability skills with the latest trends and technologies in IT.

Teacher Feedback:

The following graph shows the responses received from the 30 faculty of the department.
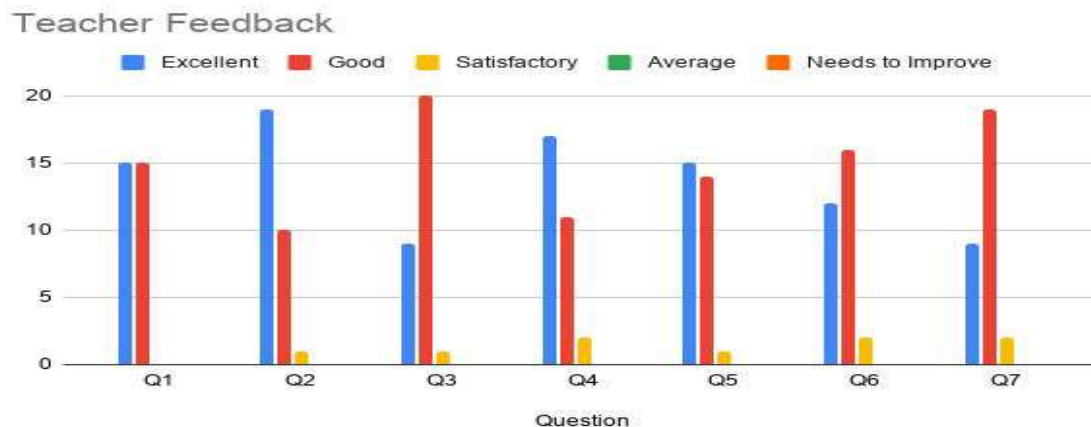
The scores of the faculty's shows that the effectiveness of the curriculum structure above the satisfactory level.

Alumni Feedback:

The feedback and suggestions from our Alumni is always significant, as their suggestions increasing the scope for introducing new courses related to contemporary areas. The following graph depicts the views of the alumni on our curriculum. From the responses of the Alumni, it realized that the curriculum structure is satisfactory and good. Also, they suggested introducing more software development tools which are in demand in the Industry.
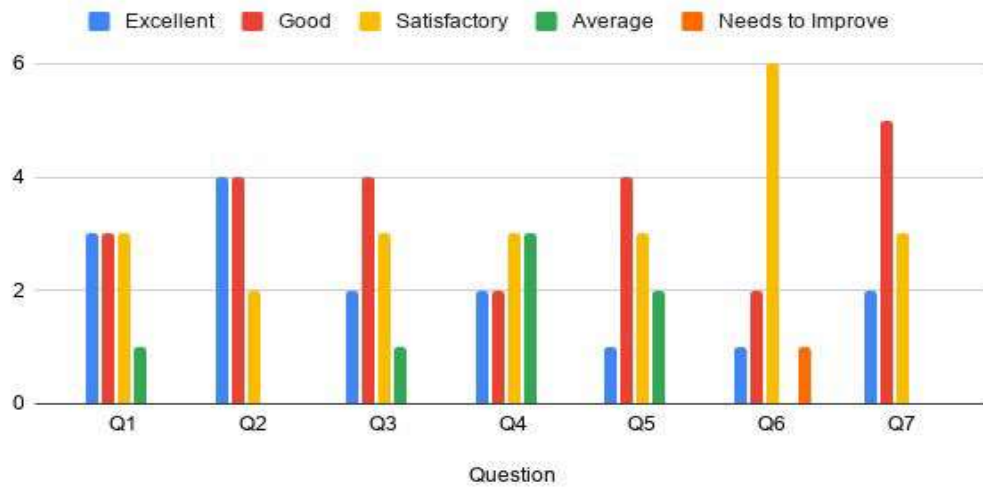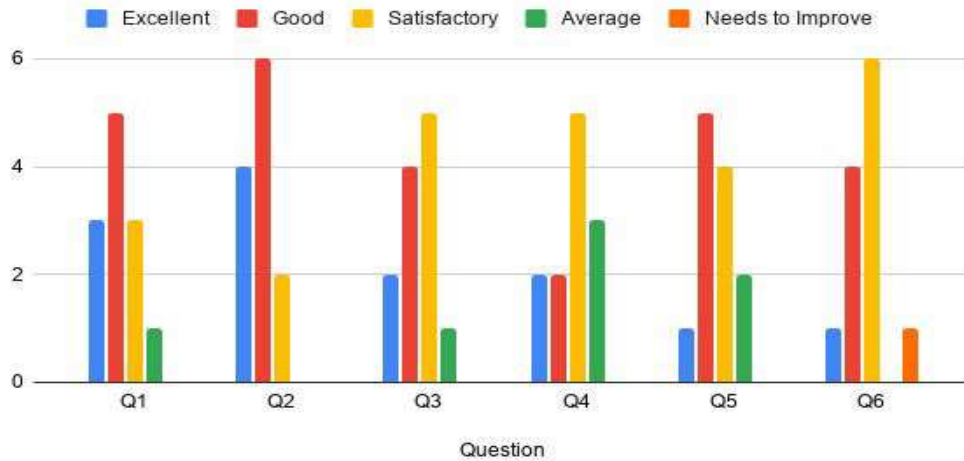

Industry Feedback:
In the following graph depicts the feedback submitted by some of our regular recruiters based on their experience with our students,

From the responses, it is understood that the curriculum structure is able to bridge the requirements of industry expectations with a satisfactory level and as the dynamic nature of the computer science field, there are lot of scope to improve the structure with inclusion of practical oriented courses in the latest trends as suggested.

Action taken based on the Feedback for the AY 2020-21

The feedback and suggestions from the stake holders shows that the existing curriculum satisfied the expectations of the students for their employment and to enrich their skill set in various latest technologies. Also, with the constant efforts from the faculty the syllabus and practical exercises were revised every year with new applications involving latest trends through industry collaborations.
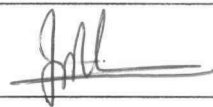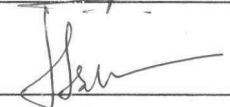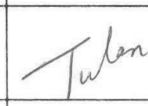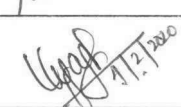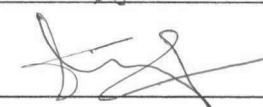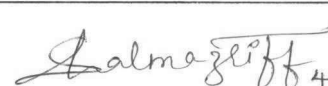
Based on the feedback and suggestions received from the Students, Faculty, Alumni and Industry, the following suggestions have been proposed and discussed in the Board of Studies meeting for AY 21-22.

- Domain Specific Elective Choices introduced in the MCA Programme
- Inclusion of NoSQL concepts in the Database Technologies
- New Elective courses like, Bio-Statistics, Categorical Data Analysis and Foundation Elective courses for MCA
- UI/UX course revised with design tools for BCA
- Evaluation components to facilitate the student's soft skill development.
- Python as core course for BSc Programme to support the students to exercise different statistical models and projects
- In order to introduce new technologies in to curriculum, It is discussed to rigour the research activities of the department.
- Trimester pattern is proposed for MCA and MSc (Data Science)
- Also, to find the opportunities for the inclusion of industry offered elective courses

Board of Studies (Computer Science)
04/02/2020

Sl No.	Name of The Member	Signature
1	Prof. Joy Paulose (Chairman BOS)	
2	Prof. Deepthi Das	
3	Prof. Saleema J S	
4	Prof. Senthilnathan	
5	Prof. Samiksha Shukla	
6	Prof. Tulasi B	
7	Prof. Vijayalakshmi A	
8	Prof. Sandeep J	
9	Prof. Roseline Mary	
10	Prof. Umme Salma	
11	Prof. Gobi R	
12	Dr. Andhe Dharani	
13	Dr. Srinivas Bhogle	
14	Dr. Garge B. Dasgupta	
15	Prof. George Thomas (Dean of Sciences)	
16	Mr. Juny Joseph (Aluminus)	
17	Mr. Lakshay Grover (Student)	

Minutes of Meeting – Board of Studies – 2020

Minutes of the 16th Meeting of the Board of Studies of the Department of Computer Science held on 04/02/2020 at 10.00 AM in Room No. 119, Block IV, CHRIST (Deemed to be University).

In the Chair: Prof. Joy Paulose, Head of the Department.

Attendance of Members

All members as per the attendance list were present except the following:
1. Dr Gargi B Dasgupta

Declaration of Quorum and Calling the Meeting to Order.

The Chairperson commenced the meeting with the silent prayer followed by a note of warm welcome to all the members of BOS and the invitees Mr Juny Joseph, Alumni President, Mr Lakshay Grover, Student Representative and **faculty from LAVASA Campus**. The Chairperson declared the validity of the quorum and called the meeting to order.

Matters on the Agenda:

1. **To confirm the minutes of the previous meeting held on 04/02/2019.**

   The minutes of the previous meeting of the Board of Studies was duly reviewed and approved in the meeting. It was noted that the courses with the practical has been combined with the theory as a single course for few of the programmes across the department as per the suggestions given by the BOS experts.

2. **To consider and recommend the proposed curriculum for BSc in Data Science programme.**

   The Board of Studies reviewed the proposed structure and the curriculum of BSc in Data Science in the meeting. Dr Srinivas Bhogle appreciated the initiative taken by the department to propose this programme and has given feedback on various courses of BSc Data Science. The variety of the courses included with respect to different disciplines like Mathematics, Statistics and Computer science were well appreciated with very positive feedback. The board reviewed and appreciated the initiative. Having considered the initiatives and scope of the programme, the Board approved the curriculum to be effective from the next academic year, subject to the approval of the Academic Council.

3. **To consider and recommend the proposed structure and changes in the curriculum for MSc in Data Science programme.**

The Board of Studies reviewed the proposed structure and change in the curriculum of MSc in Data Science in the meeting. Dr Srinivas Bhogle and Dr Andhe Dharini appreciated the initiative taken by the department to propose this programme and has given feedback on various courses of MSc Data Science. Based on the suggestions from the faculties, MDS 271 – Machine Learning course was revised with inclusion of lab components along with theory course and MDS341C – Econometrics course is introduced as an elective. Having considered the validity of the reasons for the suggested changes, the Board approved the same, subject to approval of the Academic Council.

4. **To consider and recommend the proposed structure and changes in the curriculum of MCA programme.**

The Board of Studies reviewed the proposed structure of MCA of all the semesters. Dr Andhe Dharini and Dr Srinivas Bhogle, suggested updating the syllabus of MCA 233 – Discrete Mathematics aligned with different computer science applications. Also, Mr Juny Joseph suggested revising the content of the course MCA 332 – Human Resource Management incorporating HR Analytics. The board reviewed the revision of following core papers MCA371 – Java Programming, MCA372 – Unix Programming, MCA471 – Mobile Applications, MCA571 – Cloud Computing and MCA572 - .Net Technologies to incorporate the lab components along with theory. Also, the board reviewed the proposal of offering the following elective courses for the incorporation of lab components along with theory,

MCA472A – Digital Image Processing,
MCA472B – Software Quality and Testing,
MCA472C –Data mining,
MCA472D – NoSQL,
MCA472E – User Interface and User Experience Design
MCA472F – Linux Administration
MCA573A – Information Reterival and Web Mining
MCA573B – Database Administration
MCA573C – Neural networks and Deep Learning
MCA573D – Artificial Intelligence
MCA573E – Business Intelligence
MCA573F – Bio Informatics
MCA573G – Data Visualization.

The board reviewed the suitability of the electives and appreciated the efforts of introducing the latest trends in the curriculum. Having considered the validity of the reasons for the suggested changes, the Board approved the same, subject to approval of the Academic Council.

5. **To consider and recommend the proposed structure and changes in the curriculum of MSc in Computer Science programme.**

    The Board of Studies reviewed the proposed structure of MSc in Computer Science of all the semesters. Dr Andhe Dharini and Dr Srinivas Bhogle, suggested updating the syllabus of MCS135 – Discrete Mathematical Structures aligned with different computer science applications.

    The board reviewed the revision of core paper MCS371 – Machine Learning for 2019 Batch and MCS171 – Programming in Java, MCS172 – Unix Operating System, MCS173 – Python Programming, MCS271 – Data Structures, MCS272 – Mobile Applications, MCS371 – Machine Learning for 2020 Batch, to incorporate the lab components along with theory.

    Also, the board reviewed the proposal of offering the following elective courses for the incorporation of lab components along with theory,
    MCS273A - Digital Image Processing
    MCS273B - Software Quality and Testing
    MCS273C - Data Mining
    MCS273D - NoSQL
    MCS273E - User Interface/User Experience (UI/UX)
    MCS273F - Linux Administration

    The board reviewed the suitability of the electives and appreciated the efforts of introducing the latest trends in the curriculum. Having considered the validity of the reasons for the proposed and suggested changes, the Board approved the same, subject to approval of the Academic Council.

6. **To review and recommend the proposed structure and changes in the curriculum of MSc in Computer Science and Applications programme.**

    The Board of Studies reviewed the structure of MSc (CSA) and revision in syllabus for the courses MCSA131 – Programming in Java and MCSA233 – Advanced Operating System. The new course codes were introduced for all the courses in the proposed structure. Having considered the validity of the reasons for the suggested changes, the Board approved the same, subject to approval of the Academic Council.

7. **To consider and recommend the proposed changes in the curriculum of BSc(CMS & CME) programme.**

    The Board of Studies reviewed the proposed changes in curriculum for Semester V and VI of BSc (CMS & CME). In the proposed new structure the following new elective

courses with lab components were introduced CSC541C – Business Intelligence and CSC541D – Digital Image Processing and CSC542D – Graphics and Animation . The board reviewed the suitability of the electives and appreciated the efforts of introducing the latest trends in the curriculum.

Having considered the validity of the reasons for the proposed and suggested changes, the Board approved the same, subject to approval of the Academic Council.

8. **To consider and recommend the proposed structure and changes in the curriculum of BCA programme.**

The Board of Studies reviewed the proposed structure and syllabus of BCA Programme. The board reviewed the execution of Fast Track programme and appreciated the initiative. BCA 542C – Cyber Security course was proposed as an elective, BCA631 – Machine Learning as a core paper and BCA641D – Internet of Things as an Elective course were proposed in semester – V and Semester VI. Also, the syllabus for all the courses (except major Project) in Semester – VI were proposed as Theory and Lab courses. Having considered the validity of the reasons for the proposed suggested changes, the Board approved the same, subject to approval of the Academic Council.

9. **To consider and recommend the proposed structure and curriculum of MSc(Data Analytics) programme.**

The Board of Studies reviewed the proposed structure of MSc in Data Analytics. The variety of the courses included with respect to different disciplines like Mathematics, Statistics and Computer science were analyzed. The board reviewed and appreciated the initiative. Having considered the initiatives and scope of the programme, the Board approved the curriculum, subject to the approval of the Academic Council.

10. **To consider and recommend the proposed structure and curriculum of BSc (Economics and Analytics) programme.**

The proposed structure and curriculum were discussed in the meeting. The board asked the department to incorporate the suggestions and approve at in the department.

11. **To consider and recommend the curriculum structure of MPhil in Computer Science programme.**

The board reviewed the structure and curriculum of MPhil in Computer Science and approved the same.

12. **To consider and recommend the structure of PhD in Data Science programme.**

The board reviewed and approved the proposal of PhD Data Science, and asked the department to follow the guidelines and regulations of the University.

13. **To review the Results of the ESE October 2019 for all Computer Science programme**

The Result Analysis of the End Semester Examinations for all the Computer Science programmes was reviewed by the BOS.

14. **To consider and recommend the Panel of Examiners.**

The Board reviewed and recommended the Panel of Examiners of the Department of Computer Science.

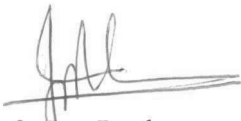15. **To consider and recommend the Open Elective Course.**

The Board reviewed and recommended the proposed the following open elective courses:
- CSC0615 – Digital Marketing
- CSC0616 – Data Analysis Using MS-Excel.

16. **To consider any other matter with the permission of the Chair.**

Dr. Srinivas Bhogle appreciated the efforts taken by the department for bringing in the latest trends into the curriculum. The Board appreciated the introduction of research in the young minds and the addition of new elective courses in under graduate and post graduate programmes.

With no other matters to discuss, the Chairperson adjourned the meeting thanking all the members present. The Chairperson thanked Dr. Srinivas Bhogle, Dr. Andhe Dharini , Mr Juny Joseph and Mr Lakshay Grover for their presence and valuable suggestions.

Prof. Joy Paulose
Chairperson
Board of Studies
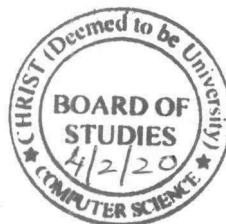
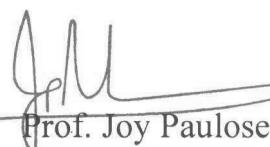# CHRIST (Deemed to be University), Bangalore – 29

Department of Computer Science

Board of Studies

Annexure

As mentioned in the BOS minutes (Serial Number: 4, 5, 6 and 8) the following Courses of the respective programmes have been proposed for inclusion and revision in the curriculum of the academic year 2020 - 21.

SNo	Programme	Course Code	Course Name
1	MCA	MCA241B	INTERNET OF THINGS
2	MCA	MCA431	MACHINE LEARNING
3	MCA	MCA441F	DIGITAL MARKETING
4	MCA	MCA171	PROGRAMMING IN C AND DATA STRUCTURES
5	MCA	MCA172	WEBSTACK DEVELOPMENT
6	MCA	MCA271	MICROPROCESSOR AND ALP
7	MCA	MCA274	SOFTWARE ENGINEERING PROJECT
8	MSc-CSA	MCSA341F	BLOCK CHAIN ARCHITECTURE AND APPLICATION
9	MSc-CSA	MCSA342E	BIOINFORMATICS
10	MSc-CS	MCS171	PROGRAMMING IN JAVA
11	MSc-CS	MCS172	UNIX OPERATING SYSTEM
12	MSc-CS	MCS133	DISCRETE MATHEMATICAL STRUCTURES
13	MSc-CS	MCS271	DATA STRUCTURES
14	MSc-CS	MCS371	MACHINE LEARNING
;15	BCA	BCA672A	CLOUD COMPUTING
16	BCA	BCA672B	UI/UX DESIGN
17	BCA	BCA672C	SOFTWARE TESTING
18	BCA	BCA672E	LINUX ADMINISTRATION

Prof. Joy Paulose

Head, Department of Computer Science.