

# **REPORT ON DEPARTMENT FEEDBACK AND EVALUATION SYSTEM**

## **FEEDBACK SYSTEM**

- The attainment of course outcomes are evaluated by direct and indirect assessment methods
- At regular intervals, the student feedback is collected about the course teacher, as well as about the course
- Most of the programmes are offered and evaluated on the basis of OBE and Continuous Improvement mode
- The institute and all the eligible programmes have been accredited
- Feedback from all the stakeholders including Students, Parents, Alumni, Industry/Employers, and Faculty are periodically obtained and the sample feedback are attached.

## **Modes of Feedback**

The various modes of feedback collection is given below :

- Student feedback about the course and the programme are collected at regular intervals.
- Alumni feedback is obtained through various means viz., exit feedback survey (immediately after completion of programmes), BoS, School level advisory committee, Internal Quality Assurance Cell and Academic council, etc.
- Industry feedback - through BoS, School level advisory committee, Academic Council and Employer survey.
- Parents' feedback - through Parent - Teachers meeting, BoS and SLAC meetings.
- The stakeholders feedback received through Institution web portal are also considered.

## **Respondents for the Feedback**

The report on the structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents are given below.

## STUDENTS' FEEDBACK:

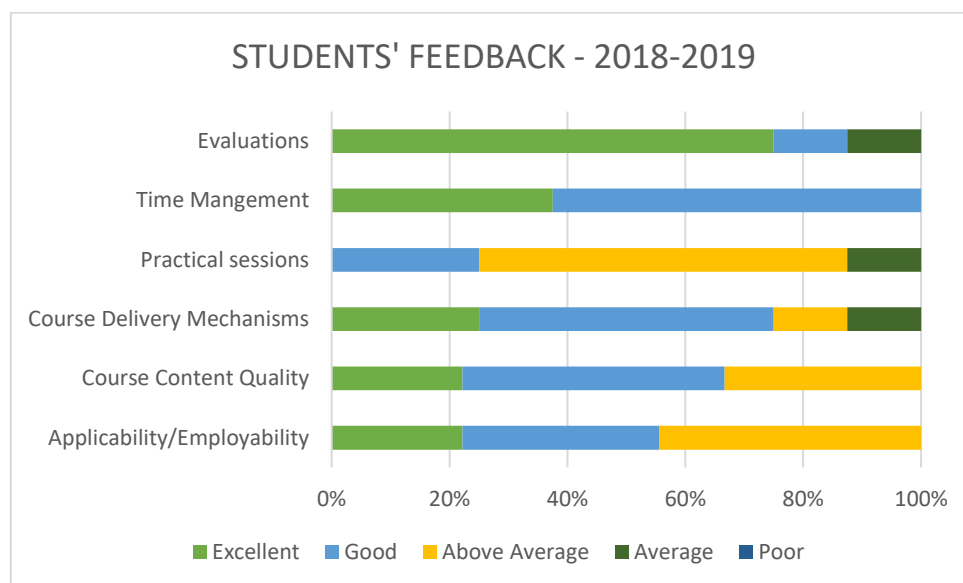
The customary practice is to obtain regular feedback from students and update/ extend the curricular, co-curricular and extra-curricular activities accordingly. The criteria followed to receive the feedback is given in the following section. The action taken in response to the obtained feedbacks are also reflected in the corresponding BoS, following the survey of feedback.

The data collected and analysed are organized in the order of academic years in the successive sections.

### Criteria for Collecting Students' Feedback: [\(SAMPLE ATTACHED\)](#)

1. To identify the validity of the course in terms of applicability
2. To ensure that the course improves employability
3. To obtain feedback on the course content
4. To rate on the course delivery mechanisms
5. To obtain suggestions for improvement

### STUDENTS' FEEDBACK FOR THE ACADEMIC YEAR – 2018-2019



**Fig. 1. Students' Feedback for the academic year 2018-2019**

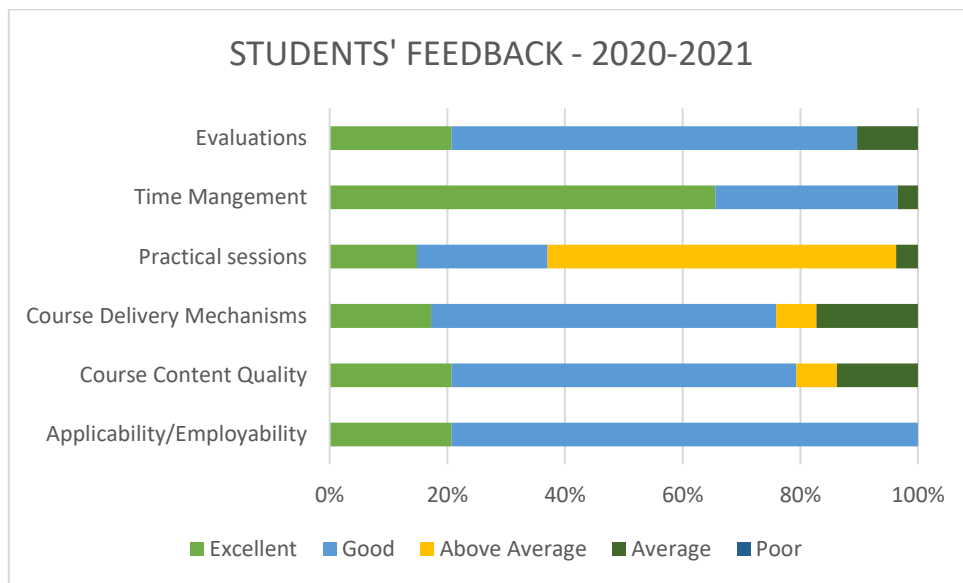
It has been observed from Fig. 1. that the students' appreciation on the curriculum, teaching and learning practices, and evaluation schemes are rated high. Students' expectations on more practical exposure has been taken into serious concern and sufficient changes are brought into the academic courses with more emphasis on market-valued programming courses to be included.

**ACTION TAKEN:**

As a result, necessary inclusions of course (as listed below) are made in the following BoS ([minutes attached](#)) and additional practical training are provided:

- E-mail Forensics (18CA2019) – included in the [Academic Year Book - 2019](#)

**STUDENTS' FEEDBACK FOR THE ACADEMIC YEAR – 2020-2021**



**Fig. 2. Students' Feedback for the academic year 2020-2021**

Analysing Fig.2., it is obvious that students were quite satisfied with the teaching process, evaluations, applicability and employability nature of courses. However, they requested for additional practical sessions and some more upgraded courses on Digital Forensics and new AI based Security Mechanisms.

### **ACTION TAKEN:**

To fulfil the requirements of students, immediate counsel on the required courses and their content are made and efforts were made to frame their syllabus effectively. The prepared courses (listed below) passed the council of Board of Studies ([minutes attached](#)) and were implemented in the consecutive year ([in the Academic Year Book - 2020](#)):

- Inclusion of additional lab experiments on Advanced Digital Forensics
- Python for Network and Security ([20CA2048](#))
- Python for Network and Security Lab([20CA2049](#))
- Artificial Intelligence Security ([20CA3016](#))
- Internet of Things Security ([20CA3015](#))

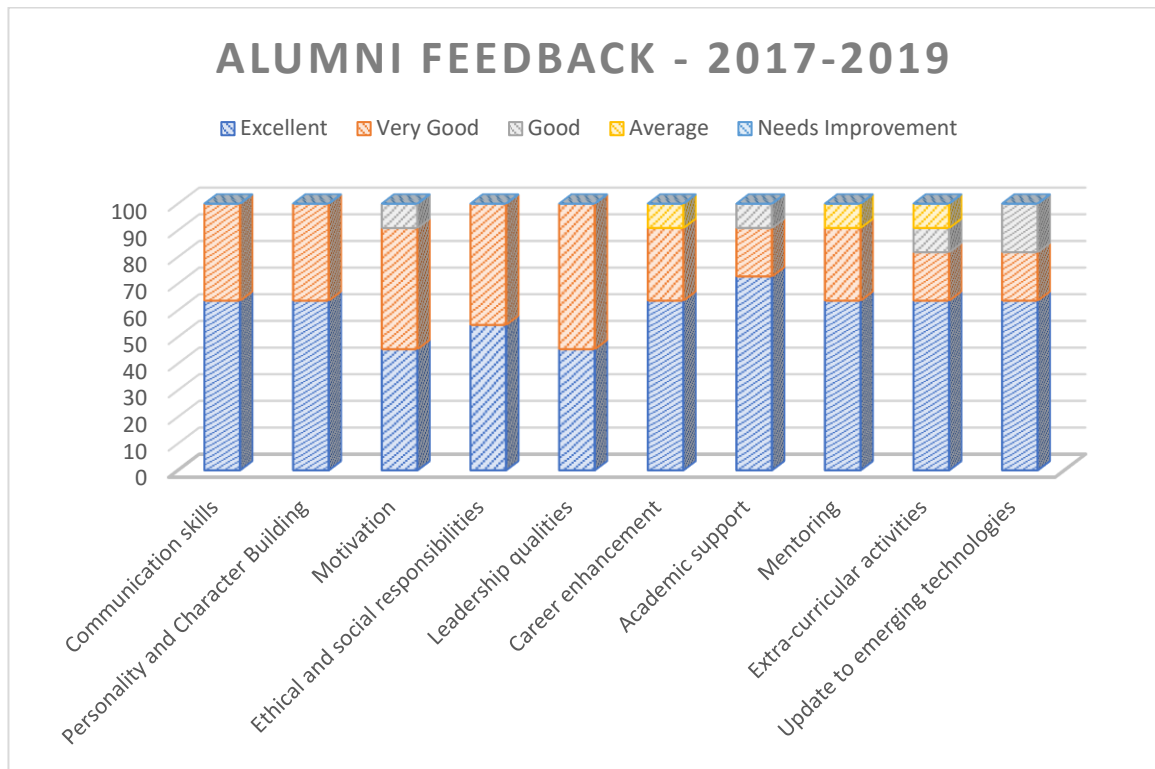
### **ALUMNI FEEDBACK:**

Similar to students' feedback, the alumni feedback is regularly obtained and reflected in the curriculum. The criteria used is listed in the next section. The data collected and analysed are organized in the order of academic years in the successive sections.

#### **Criteria for Collecting Alumni Feedback: ([SAMPLE ATTACHED](#))**

1. To estimate the relevance of courses in relation to the programme
2. To rate the sequence of the courses included in the programme
3. To measure the competencies in relation to the course content
4. To rate the sequence of topics in the units
5. To rate the offering of electives in relation to the specialization streams
6. To rate the offering of electives in relation to the technological advancements
7. To assess the courses included in the programme that are skill-related and suitable to the industry
8. To rate the domain used for designing the experiments in terms of the suitability of the tools to the domain
9. To rate the experiments in laboratory in terms of their relevance in real time applications
10. To rate the courses learnt in relation to the work perspectives.

## ALUMNI FEEDBACK FOR THE ACADEMIC PERIOD – 2017-2019



**Fig. 3. Alumni Feedback for the Academic period 2017-2019**

It is evident from the Fig.3. that the courses offered, delivery mechanisms, personal and academic support, and career guidance are specified to be excellent according to the alumni taught in the academic year 2017-2019. Alumni had indicated the need for upgrading syllabus to include emerging technologies.

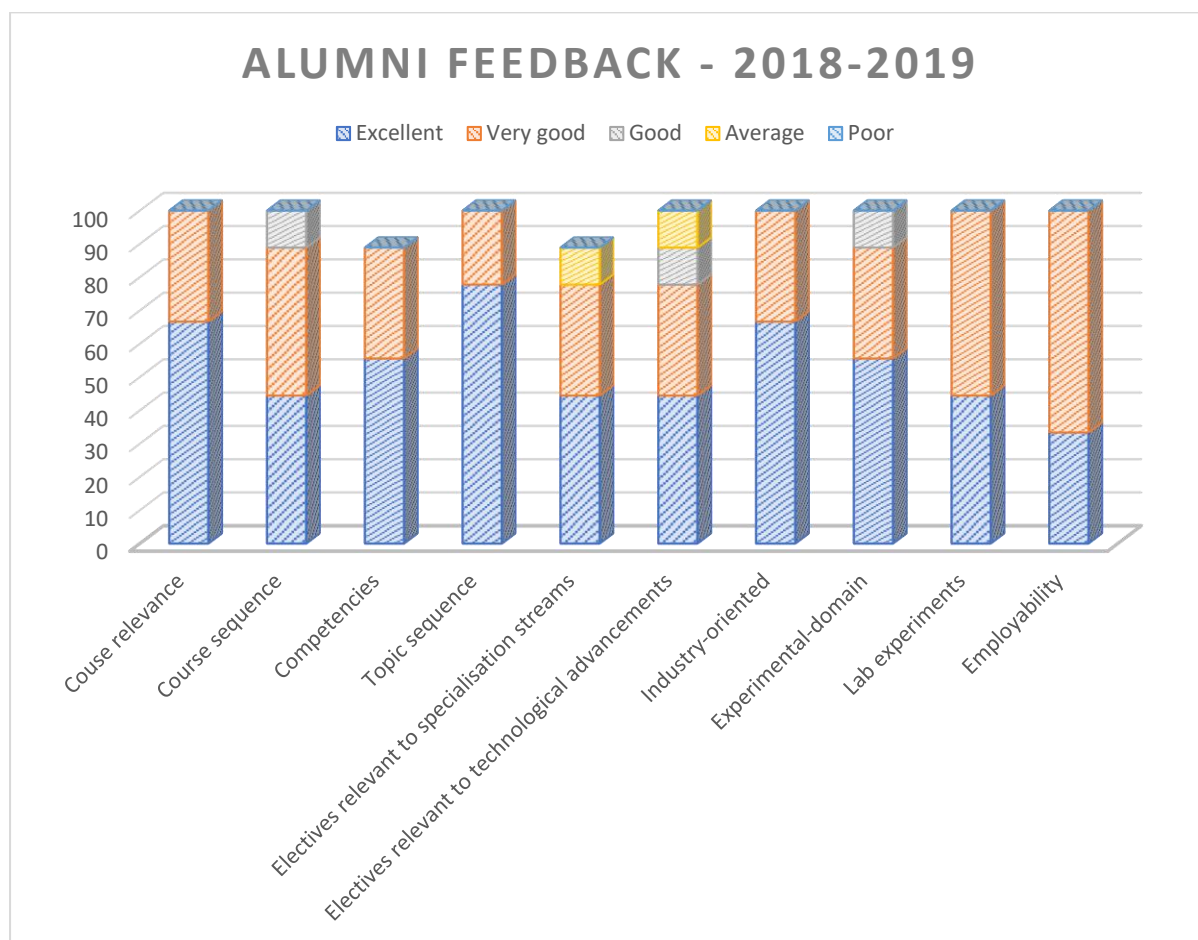
### **ACTION TAKEN:**

As majority of the feedback of alumni was similar to the students' expectation of the academic year, necessary actions could be taken to add additional industrial-need based courses like

- Essentials of Python Programming ([20CA2008](#)) and
- Programming in Python Lab ([20CA2009](#))

## ALUMNI FEEDBACK FOR THE ACADEMIC PERIOD – 2018-2020

The criteria for the previous year (2019) has been updated according to the need of the environment and digital market. More concentration has been given onto the analysis of the curriculum and development. The data collected were statistically analyzed.



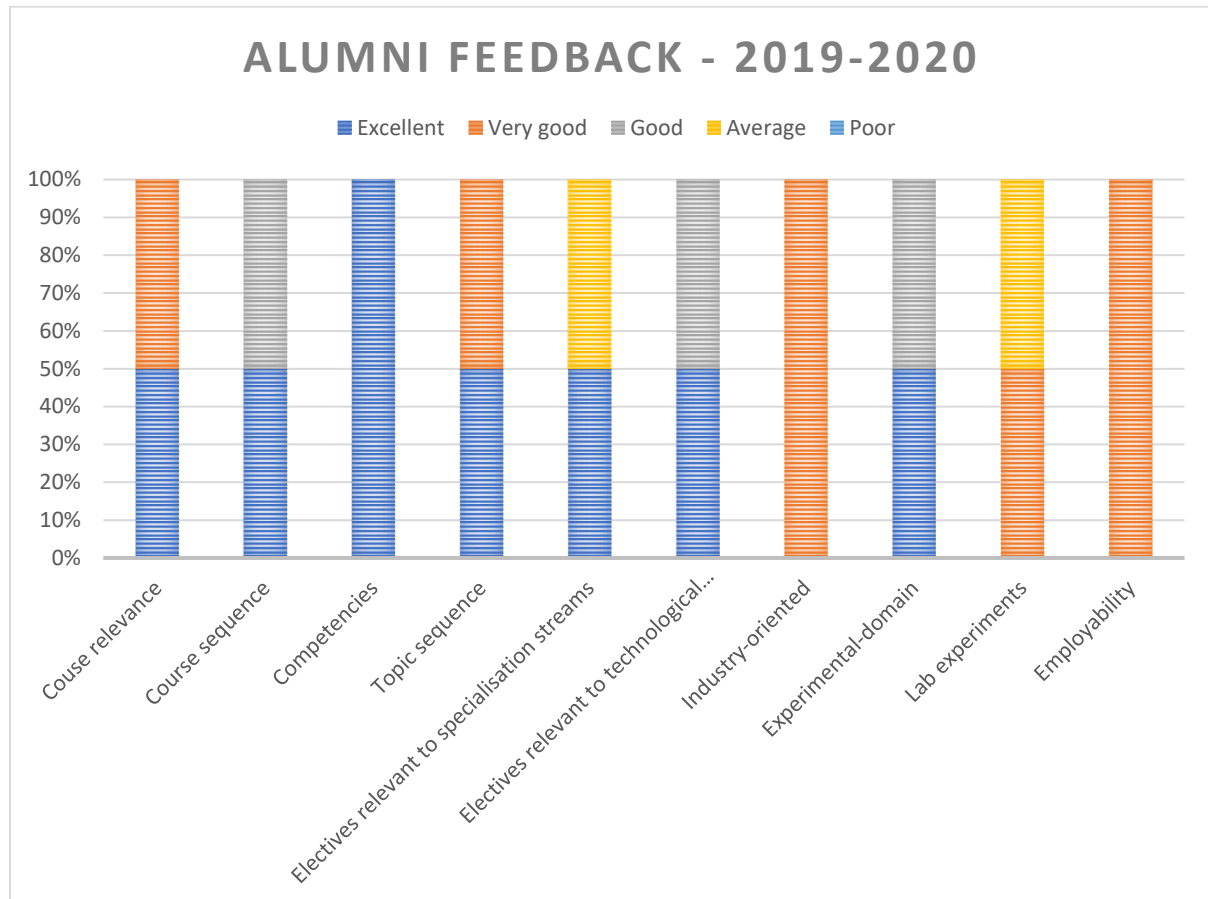
**Fig. 4. Alumni Feedback for the Academic period 2018-2020**

It has been observed from Fig. 4. that the average of students' satisfaction has been maintained in the academic years (2018-2020) of the alumni. It is important to note that more changes encouraging industrial practice accommodated in the syllabus has been appreciated. Their request on additional lab sessions were taken into concern (as indicated by the students too in 2018-2019).

**ACTION TAKEN:**

Additional lab sessions were included such that the practical skills of students meet the requirements of the IT market. Also, higher focus has been given for the employability coefficient based on the technical knowledge obtained.

**ALUMNI FEEDBACK FOR THE ACADEMIC YEAR – 2019-2020**



**Fig. 5. Alumni Feedback for the Academic year 2019-2020**

Assessing the Fig.5., it is obvious that the satisfaction of the alumni had decreased in terms of practical sessions, which had been severely affected due to the pandemic. However, it is essential to note that the competencies and employability factors had not been compromised despite the situation. Initially, the grand shift to online learning has made a serious impact on students' learning styles.

### **ACTION TAKEN:**

Additional mechanisms and arrangements were made for effective online lectures. New evaluation schemes were framed and the demonstration classes were shifted to usage of cloud-based software tools in order to meet the technical challenges faced by the passed out students.

### **TEACHERS' FEEDBACK:**

Teachers have been provided with the feedback forms to assess the courses they handled in each semester. The content, relevancy and structure were given higher importance in the criteria as listed in the next section. The data collected are scrutinized and actions are taken in the subsequent academic year.

#### **Criteria for Collecting Teachers' Feedback: ([SAMPLE ATTACHED](#))**

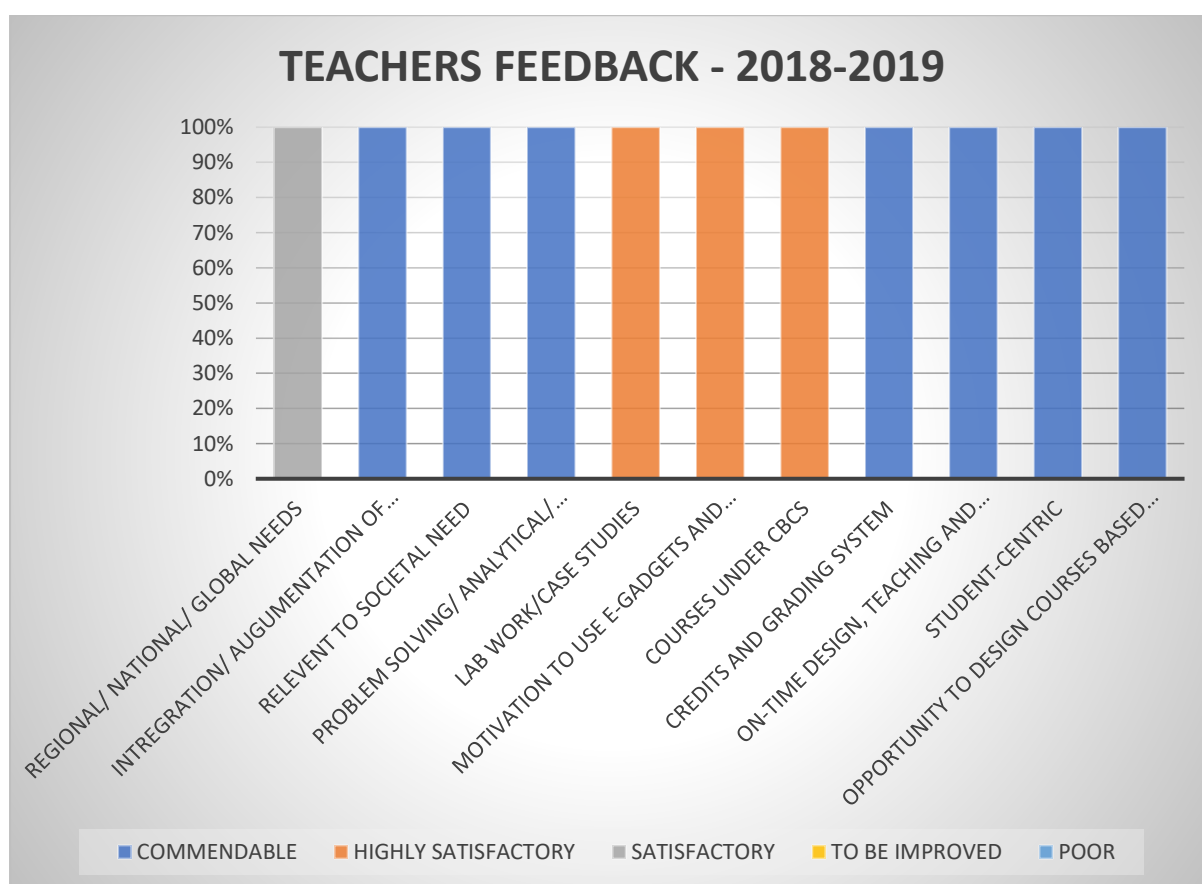
On the basis of rated scales (Commendable, Highly Satisfactory, Satisfactory, To be improved, Poor), the feedback has been obtained. The criteria given are as follows:

1. Courses handled by the teacher are ensured to cater to the Regional/ National/ Global needs.
2. Courses are ensured to integrate/ augment professional and employable skills
3. Course contents are checked for relevancy to the societal needs and to include recent topics.
4. To check whether the courses involve problem-solving/ analytical/ creative and innovative skills required for the students.
5. To verify whether the courses involve sufficient lab work/ case studies/ field trips.
6. To check whether the courses motivate the students to use the resources such as library and e-gadgets for their learning.
7. To identify whether the curriculum contains wide-range of courses under CBCS including Core, Core Electives, Value Additions and Projects.
8. To validate whether the credit and grading system followed are indicative of the weightage of the courses offered.



9. To check whether the curriculum design, teaching-learning evaluation and examination transactions are effectively carried on time.
10. To validate whether the evaluation schemes fulfil the learning system being student-centric.
11. To identify whether the opportunity given to the teacher to design the course is as per the common objective of the department for the benefit of students.

### TEACHERS' FEEDBACK FOR THE ACADEMIC YEAR – 2018-2019



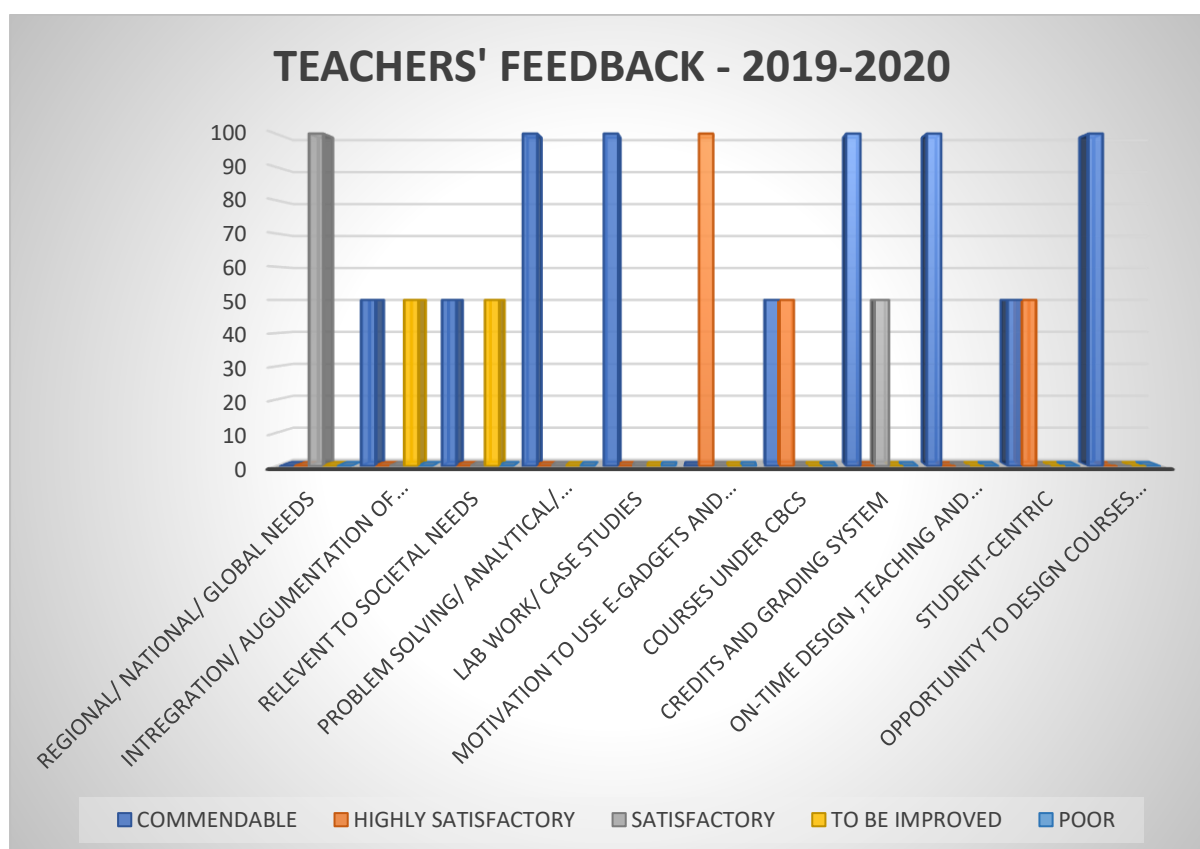
**Fig. 6. Teachers' Feedback for the academic year 2018-2019**

It is clear from Fig. 6 that the teachers expected to incorporate courses that relate to the regional, national and global needs.

### **ACTION TAKEN:**

More relevant updates were made in the courses after passing BoS in the respective academic year, particularly the course on Email Forensics ([18CA2019](#)). Furthermore changes were planned for further study, scrutiny and implementation in the next academic year.

### **TEACHERS' FEEDBACK FOR THE ACADEMIC YEAR – 2019-2020**



**Fig. 7. Teachers' Feedback for the academic year 2019-2020**

It is imperative that more of emphasis had been given for the inclusion of courses that meet the contextual needs and global importance. Further, the change in the credits and grading system had been observed to affect the teachers.

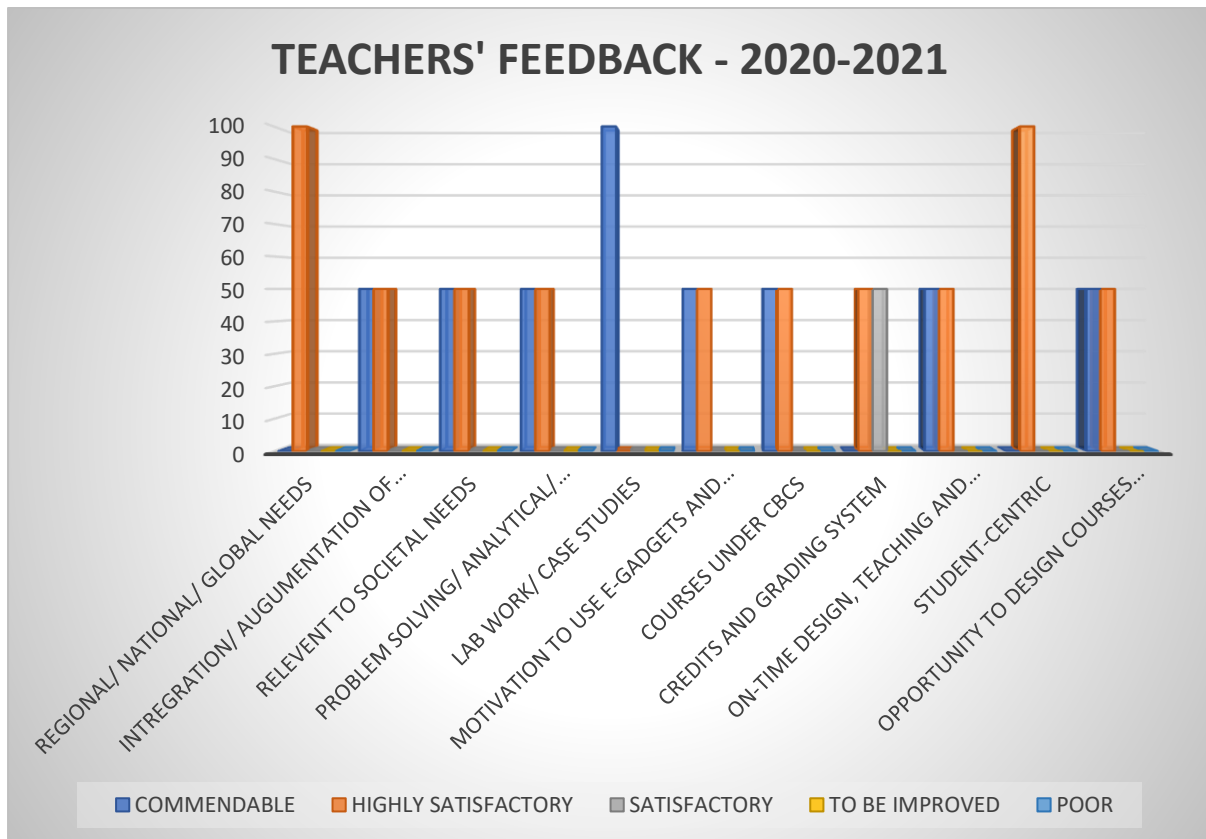
### **ACTION TAKEN:**

After a thorough scrutiny on the courses to be included in the curriculum and several rounds of discussions and preparations, the BoS approved on the delivery of the following courses:

- Essentials of Python Programming ([20CA2008](#))

- Python for Network and Security ([20CA2048](#))
- Artificial Intelligence Security ([20CA3016](#))

### TEACHERS' FEEDBACK FOR THE ACADEMIC YEAR – 2020-2021



**Fig. 8. Teachers' Feedback for the academic year 2020-2021**

It is good to note that after implementing new systems for online education, it has been well appreciated by teachers and almost they were satisfied in all the categories. The grading system seems to still have an impact, due to the performance of students online.

## **EMPLOYERS' FEEDBACK:**

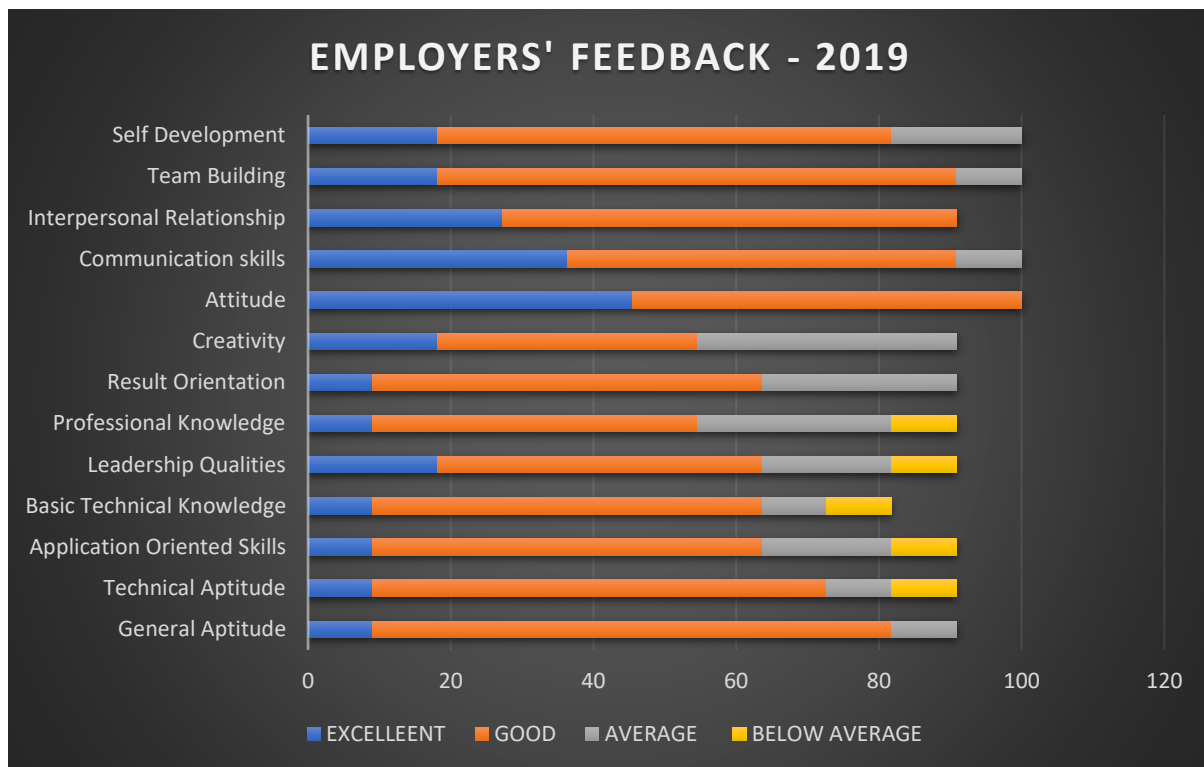
By the end of each academic year, the Campus Placement Cell actively brings in several IT companies into campus and quite an appreciable fraction of students get placed from our department every year. After the recruitment process, the employers are provided with the feedback form to know and update the capacity and capabilities of the department accordingly. The criteria for collecting feedback are given in the next section.

The collected data are collected, entered and statistically analysed and their reports are presented in the successive sections. Also, care has been taken to critically focus upon the specific suggestions and comments provided by the companies, such that adequate changes are made to the teaching and learning process in the department.

### **Criteria for Collecting Employers' Feedback: ([SAMPLE ATTACHED](#))**

1. To identify the technical skills of the students. More specifically, to verify the following:
  - a. General aptitude
  - b. Technical aptitude
  - c. Application-oriented skills
  - d. Basic technical knowledge
  
2. To verify the soft-skills of the students. The criteria used are as follows:
  - a. Leadership qualities
  - b. Professional knowledge
  - c. Result orientation
  - d. Creativity
  - e. Attitude
  - f. Communication skills
  - g. Interpersonal relationship
  - h. Team building
  - i. Self-development
  
3. To collect the additional comments and feedback.

## EMPLOYERS' FEEDBACK FOR THE ACADEMIC YEAR – 2019



**Fig. 9. Employers' Feedback Report of the academic year 2018-2019**

As observed from Fig.9., employers were satisfied with almost all the criteria. However, as indicated in certain areas like professional knowledge, leadership qualities, application/ technical skills and technical aptitude were taken into concern, to plan for future enhancements.

### **ACTION TAKEN**

In order to fulfil the expectations of companies, special webinars and trainings were arranged to students, to provide them with special training on aptitude development and technical skills, and personality development.

### **PARENTS' FEEDBACK:**

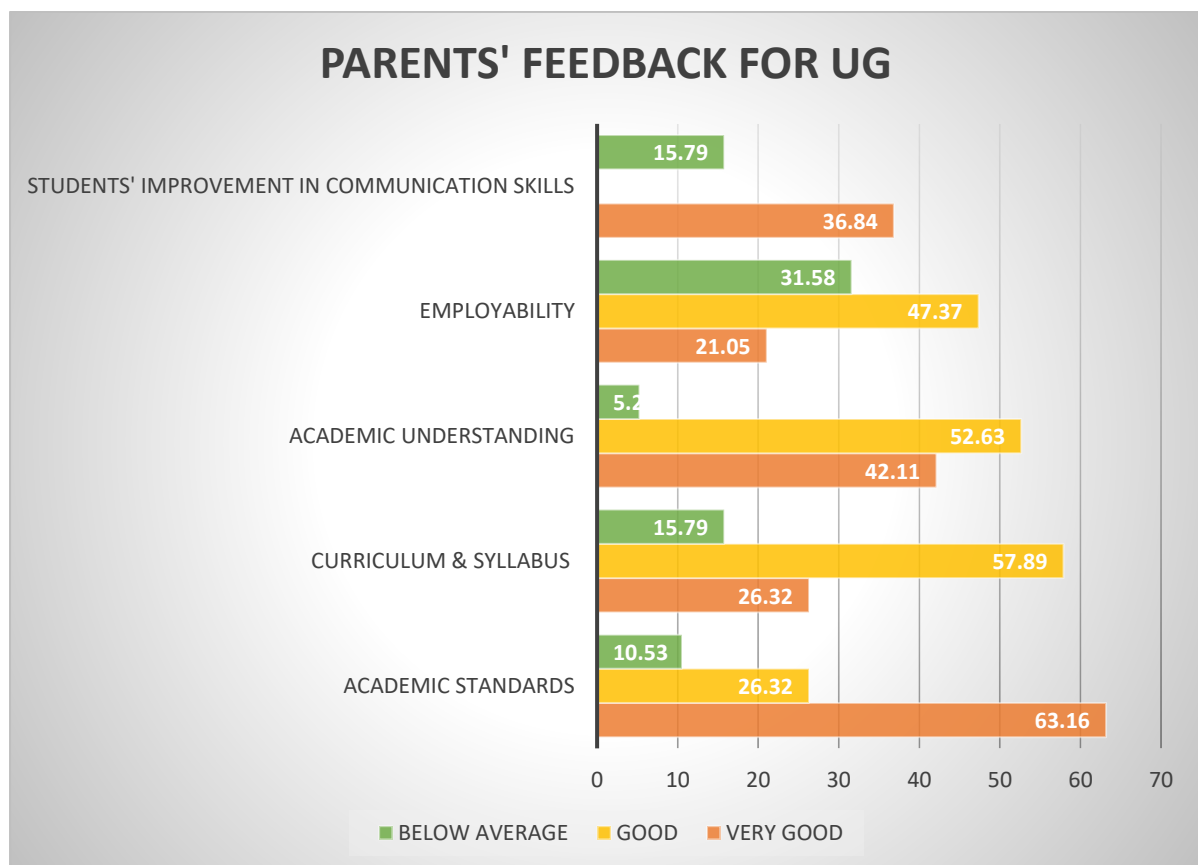
Parents are considered to be one among the important stakeholders and are adequately interviewed or received feedback in written form. The criteria used are to reflect their observation on their children and their needs. The details are provided in the following section.

The data collected are analyzed and sufficient actions were taken.

**Criteria for Collecting Parents' Feedback: ([SAMPLE ATTACHED](#))**

1. To know the opinion of parents regarding applicability of the course.
2. To rate the significance of the curriculum and syllabi.
3. To measure the capacity and knowledge of their children after the completion of the programme.
4. To identify how far the syllabus has been supportive enough to find placement for their children.
5. To recognize the quality of communication skills improved after taking the programme.
6. To receive further comments and suggestions on the programme.

**PARENTS' FEEDBACK FOR UNDER-GRADUATE PROGRAMMES**



**Fig. 10. Parents' Feedback Report of the Undergraduate Programmes**

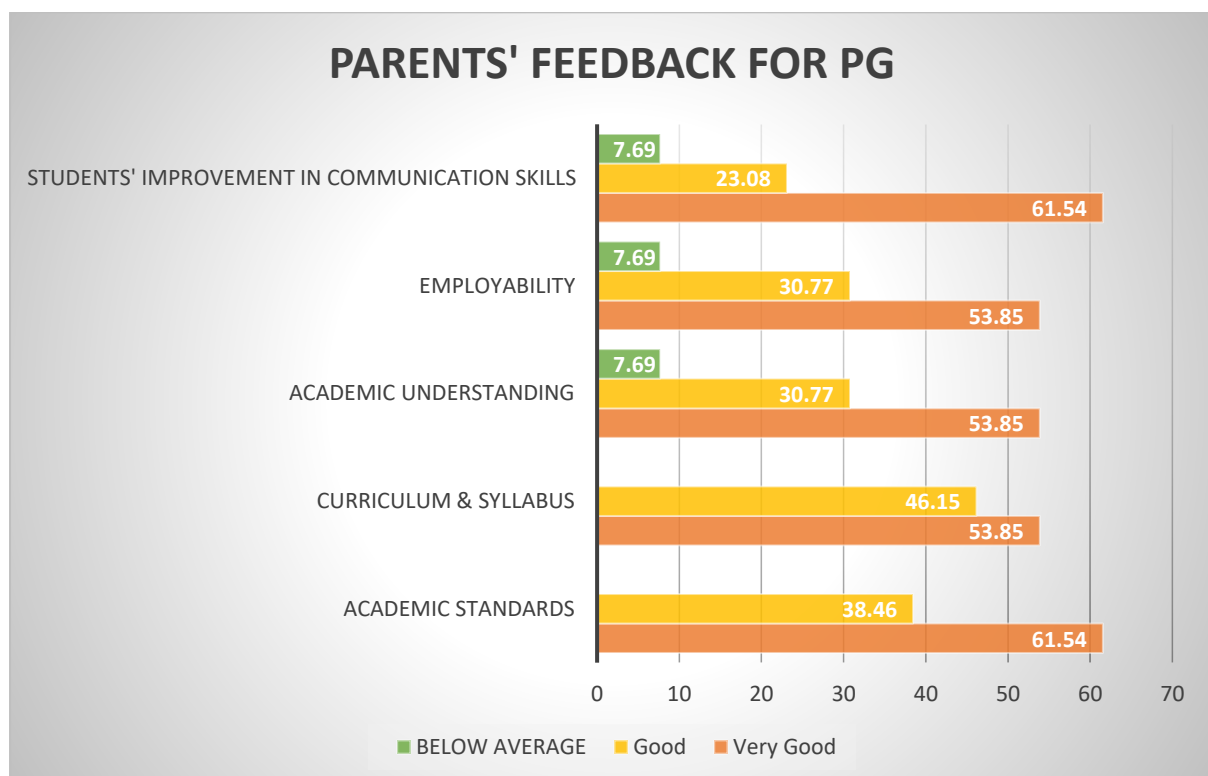
It can be noted that the parents were particular in including additional courses that improve the employability coefficient of students both in terms of technical and communication skills.

## ACTION TAKEN

In response to the parents' feedback, action has been taken to include more industrial-oriented courses in the subsequent academic years. Every year a special team to analyze and work on the market teams have been designated and sufficient enhancements were made in the curriculum (as indicated in the previous sections too). The courses passed in BoS ([minutes attached](#)) and included after their feedback are:

- Python for Cyber Security ([20CA3020](#))
- Python for Cyber Security lab ([20CA3021](#))
- Problem Solving Using Programming ([20CA2002](#))
- Problem Solving Lab([20CA2003](#))
- Essentials of Python Programming ([20CA2008](#))
- Programming in Python Lab ([20CA2009](#))

## PARENTS' FEEDBACK FOR POST-GRADUATE PROGRAMMES



**Fig. 11. Parents' Feedback Report of the Postgraduate Programmes**


It is interesting to note that the parents were quite happy with the provisions available in the campus, programme standards, course delivery and the employability of students. A smaller fraction of parents had reflected on the need on further more improvements on communication skills and employability.

#### **ACTION TAKEN**

Seminars, workshops and special trainings have been arranged to amplify the skills of students in terms of language and applicability.



Students' Feedback Sample:

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**INTERNAL QUALITY ASSURANCE CELL (IQAC)**

**Feedback from Students on the Curriculum  
and Syllabi of the B.Sc(DSA)/ B.Sc(ISDF)/ M.Sc(ISDF)/ M.A Integrated Media &  
Communication Programme for the Academic Year 2018-2019**

Feedback from Mr. *Mr.* JOEL ALEXANDER B  
Programme: B.Sc (ISDF) M.A. (.....)  
Department: DESIGN SCIENCES  
School: .....

Feedback on Curriculum (Number of Theory Subjects, Laboratory subjects, Core Subjects and Electives. Subjects having industrial applications for improving employability)

1. ....  
2. ....  
3. ....

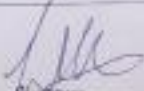
Suggestions to improve the Curriculum

1. Mostly security based subjects are covered.  
2. need to concentrate more on Digital Forensics  
3. ....

Feedback on Syllabi of subjects studied and suggestions for improvement (any three subjects)

SLNo.	Name of the Subject	Feed back	Suggestions for improvement
1	<u>Cyber crime and Cyber law</u>	<u>Teaching way not good</u>	
2			
3			

Date: 12/08/19

  
Name of the Student: Joel Alexander

### Alumnae Feedback Sample:

Name of the Alumni	Batch	Name and Address of the Organization	Date of Feedback
KISHOR K	2017 - 2020	KISHOR-K - Kaniya	04-08-2020

S. No.	Question	Excellent (10)	Very Good (8)	Good (6)	Average (2)	Poor (0)	Total Score	Suggestions if any
1.	How do you rate relevance of the courses in relation to the programme?	✓						
2.	How do you rate the sequence of the courses included in the programme?	✓						
3.	How do you rate the competencies in relation to the course content?	✓						
4.	How do you rate the sequence of topics in the units?	✓						
5.	How do you rate the offering of electives in relation to the specialization streams.	✓						
6.	How do you rate the offering of electives in relation to the technological advancements.	✓						
7.	How do you rate the courses included in the program that are skills related and tuning to the industry?		✓					
8.	How do you rate the domain used for designing the experiments in terms of the suitability of the tools to the domain?	✓						
9.	How do you rate the experiments in laboratory in terms of their relevance in real time applications?		✓					
10.	How do you rate the courses that you have learnt in relation to your current job?		✓					
	Total							

Signature *Kishor*

## Teachers' Feedback Sample:

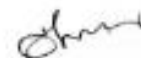
### TEACHER FEEDBACK ON CURRICULAR DESIGN AND DEVELOPMENT

Name of the Faculty	Department	Academic year
D. Poranay Deshpande	Digital Science	2019-2020(E)
Programme	Course Handled	Course code
UG/PG/ M.Phil.	1. Deformation and Communication Tech. 2. Introduction to Information Technology 3. C 4. Programming in Java.	18CS1001 17CA2002 16CS2003 17CA2011

Note: The scales mentioned in the questionnaire are as follows:

1. Commendable 2. Highly Satisfactory 3. Satisfactory 4. To be improved 5. Poor

S. No	Questions	1	2	3	4	5
1	Courses handled by me caters to the Regional/ National / Global needs			✓		✗
2	Courses integrate / augment Professional and Employable skills				✓	
3	Course contents are relevant to the societal need and include recent topics				✓	
4	Courses involve problem solving / analytical / creative and innovative skills required for the students	✓				✗
5	Courses involve sufficient lab work / case studies/ field trips etc.	✓				
6	Courses motivate the students to use the resources such as library and e-gadgets for their learning		✓			
7	Curriculum contains wide range of courses under CBCS including Core, Core Electives, Value Additions, Projects, etc.	✓				
8	The credit and grading system followed are indicative of the weightage of the courses offered	✓				
9	The Curriculum design, Teaching-Learning-Evaluation and examination transactions are effectively carried on time	✓				
10	The evaluation schemes fulfils the learning system as student-centric		✓			
11	The opportunity given to me to design the courses as per the common objective of the department for the benefit of students	✓				



Signature with date

**Employers' Feedback Sample:**

**Karunya Institute of Technology & Sciences**  
 (Deemed to be University)  
**CENTRE FOR PLACEMENT & TRAINING**  
 Karunya Nagar, Coimbatore 641 114

**FEEDBACK FROM CORPORATES**  
**PERFORMANCE OF STUDENTS FROM KARUNYA UNIVERSITY**

1. Name of the Company: M/s Hyundai Nelsia
2. Nature of the Company – IT / ITES / Manufacturing / Service / Construction
3. Please rate the **Overall Performance** of our students as per the following parameters:-

**Technical Skills**

	Factors	Excellent	Good	Average	Below Average
<b>A</b>	General Aptitude		✓		
	Technical Aptitude		✓		
	Application Oriented Skills		✓		
	Basic Technical Knowledge		✓		

**Soft-Skills**

<b>B</b>	Leadership Qualities	✓			
	Professional Knowledge		✓		
	Result Orientation		✓		
	Creativity	✓			
	Attitude	✓			
	Communication Skills	✓			
	Interpersonal Relationship	✓			
	Team Building	✓			
	Self Development	✓			

4. Kindly Indicate if you have any other additional feed-back to offer :-

over all good.

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Signature: 

Name: Avil Kumar Venigandla

Designation: Asst Manager

Mobile Number: 9100289076

Date: 22/08/19

## Parents' Feedback Sample:



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### INTERNAL QUALITY ASSURANCE CELL (IQAC)

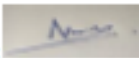
#### Feedback from Parents on the Curriculum and Syllabi of the B.C.A./B.Sc(IT)/ B.Sc(ISDF)/M.Sc(ISDF) for the Academic Year 2019-2020

Feedback from parents to help the Institution to improve the Curriculum and Syllabi taught to your son/daughter. Your feedback will be placed in Curriculum Development Cell (CDC) and Board of Studies (BoS) during the next revision of curriculum and syllabi. Kindly feel free to give your feedback.

Sl.No.	Feedback	Very Good	Good	Not bad
1	Give your feedback on the academic standards of the University	Very good		
2	How do you find the curriculum and syllabi of the programme		good	
3	After completing the programme, the academic understanding of your son / daughter		good	
4	Support given by Curriculum and syllabi for getting placement to your son/daughter			Not bad
5	Improvement of communication skills through the academic programme			Not Bad

Suggestions for improving the Curriculum and Syllabi:

1. The practical knowledge of students should improve, for that have more practical sessions than theory.
2. Add one session for group discussion regarding the latest innovations and technology updates in the field of cyber security. Instead of library session, add a session for research purpose
3. Add one session weekly for Interview training and improve communication skills
4. At least one relevant programming language should be added in the syllabus

Signature: 

Name: Varghese M A

Father/Mother of Akhila M V  
(Name of the student)

Reg.No. of the Student: PRK18ISD009

Programme: MSc

Department: IS &DF

School: Karunya Institute of Technology  
and Sciences

Date: 03/10/2020

**Board of Studies Minutes dated 7<sup>th</sup> November, 2018**



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**DEPARTMENT OF INFORMATION TECHNOLOGY**

Minutes of the Special Board of Studies Meeting held on November 7, 2018

S. No	Members	Role	Signature
1	Dr. C. Joseph Kennedy, M.Sc., Ph.D., Dean - Karunya School of Sciences, Arts and Media	Chairman	
2	Dr. A. Karthamraji, Professor, Coimbatore Institute of Technology, Coimbatore	External Member	Through Circulation
3	Enoch E. Paladin Software Solutions Pvt. Ltd - Technical and Product Head eStar-Max Technologies Pvt. Ltd - CEO	External Member	Through Circulation
4	Dr. P. Ranjit Jeba Thangiah, Associate Professor, HoD (I/I)	Internal Member	
5	Dr. D. Ponnary Pushpalatha, Assistant Professor	Internal Member	
6	Dr. C. Beulah Christie Latha, Assistant Professor	Internal Member	
7	Dr. J. Macklin Abraham Navamani, Assistant Professor	Internal Member	
8	Mrs. S. Carolin Joera, Assistant Professor	Special Invitee	

S. No	ITEMS DISCUSSED
1	The elective subjects for BCA, B.Sc (IT), B.Sc (ISDP), M.Sc (ISDF) was discussed and approved by the BoS members.

**Discussions**

Based on the inputs from the stakeholder's, new elective courses are incorporated in the syllabus.



**Board of Studies Minutes dated 28<sup>th</sup> November, 2018**



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**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Dr. P. Ranjit Jeba Thangalah**  
Associate Professor & Head (i/c)

KITS/SSAMM/IT/LET/36/2018  
November 28, 2018

Submitted to the Vice Chancellor for kind approval please

Through: The Dean (SSAMM)

*Recommended for approval  
J  
28/11/18*

Respected Sir,

**SUB:** Approval of Elective Courses and their Syllabi for BCA, BSc (IT), BSc (ISDF) and MSc (ISDF) programmes - reg.

This is to bring to your kind consideration and approval of Elective Courses for BCA, BSc (IT), BSc (ISDF) and MSc (ISDF) programmes along with the Syllabi. The same is passed in the Department CDC as well as circulated to the BoS member for their approval. Since the elective courses are to be selected by the student in the forthcoming Even Semester 2018 - 2019, approval may kindly be given. The same will be ratified in the forthcoming Academic Council.

Thanking You,

*P. Ranjit Jeba Thangalah*  
**HoD - IT**

Enc: CDC Minutes  
BoS Minutes  
List of Electives  
Syllabi

*Approved  
P  
28/11/18  
vc*

REFERENCE FROM ACADEMIC INFORMATION HANDBOOK - 2019

Credits DISTRIBUTION

Papers	Total Credits
General Core	23
Professional Core	81
Electives	22
Project	14
<b>Total Credits</b>	<b>140</b>

LIST OF COURSES

Course Code	Name of the Course	Credit
✓18CA2001	Big Data Analytics	3.00
18CA2002	Internet of Things	3.00
18CA2003	Software Metrics and Quality Management	3.00
18CA2004	Data Mining	3.00
18CA2005	Data Mining Lab	0.02
18CA2006	Programming in JavaEE	3.00
18CA2007	Programming in JavaEE Lab	0.02
18CA2008	Mobile Application development in Android	3.00
18CA2009	Mobile Application Development in Android Lab	0.02
18CA2010	Management Information System	3.00
18CA2011	Software Project Management	3.00
18CA2012	Data Analytics using Python	0.02
18CA2013	Data Analytics using Python Lab	3.00
18CA2014	Forensic Digital Image processing	3.00
18CA2015	Incident Management	3.00
18CA2016	Preserving and Recovering Digital evidence	3.00
18CA2017	Network Security Applications	0.02
18CA2018	Network Security Applications Lab	3.00
18CA2019	E - mail Forensics	3.00
18CA2020	Document Examination and Fingerprint analysis	0.02
18CA2021	Document Examination and Fingerprint analysis Lab	3.00
18CA2022	Information Ethics	3.00
18CA2023	Security Investigation and Report Writing	0.02
18CA2024	Security Investigation and Report Writing Lab	3.00
18CA2025	Trust management in E-commerce	0.02
18CA2026	Big Data Analytics Lab	3.00
18CA3001	Vulnerability assessment and Penetration testing	0.02
18CA3002	Vulnerability assessment and Penetration testing Lab	3.00
18CA3003	Access Control and Identity Management	0.02
18CA3004	Access Control and Identity Management Lab	3.00
18CA3005	Web Application Security	0.02
18CA3006	Web Application Security Lab	3.00



## Board of Studies Minutes dated 28<sup>th</sup> August, 2020



### Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES

(Declared as Deemed to be University under Sec.3 of the UGC Act. 1956)

A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION

AICTE Approved & NAAC Accredited

#### DEPARTMENT OF DIGITAL SCIENCES

#### MINUTES OF THE BOARD OF STUDIES MEETING HELD ON 28 August 2020

S. No	Members	Designation	Signature
1	Dr. C. Joseph Kennady, M.Sc., Ph.D., Dean – Karunya School of Sciences, Arts and Media	Chairman	
2	Dr. A. Kannammal, Professor, Coimbatore Institute of Technology, Coimbatore	External Member	Through Circulation
3	Enoch E Paladin Software Solutions Pvt. Ltd - Technical and Product Manager & eStaarMax Technologies Pvt. Ltd – CEO	External Member	
4	Dr. P. Ranjit Jaha Thangaiyah, Associate Professor, HoD i/c)	Internal Member	
5	Dr. D. Ponmary Pushpalatha, Associate Professor	Internal Member	
6	Dr. C. Beulah Christalin Latha, Assistant Professor	Internal Member	
7	Dr. J. Macklin Abraham Navamani, Assistant Professor	Internal Member	
8	Dr. S. Carolin Jeeva, Assistant Professor	Special Invitee	

S. No	ITEMS DISCUSSED
1.	Curriculum for B.Sc. (Information Security and Digital Forensics) – 2020 batch is approved and passed as in Table CA-1.
2.	Curriculum for M.Sc. (Information Security and Digital Forensics) - 2020 is approved and passed as in Table CA-2.
3.	The Programme Outcome, Programme Specific Outcome is approved and passed as in Annexure -I.
4.	The new courses introduced for 2020 batch onwards is listed in Table CA-3.
5.	The <b>revised courses</b> based on the feedback from stake holders is listed in Table CA-4.
6.	The syllabi in Annexure -II is approved and passed for the courses listed in CA-3 and CA-4.
7.	The courses with employability, skill development and entrepreneurship are listed in Table CA-5.
8.	The syllabi in Annexure -III is ratified for the courses listed in Table CA-6.
9.	The Course Objective and Course Outcome for 17CA and 18CA courses is approved and passed as in Annexure -IV

**REFERENCE FROM ACADEMIC INFORMATION HANDBOOK – 2020  
(VOLUME – III)**

Academic Information Hand Book 2020

Digital Sciences

Sl. No.	Course Code	Course Title	Credits
19	20CA2016	Operating System and Networking	3:0:0
20	20CA2017	Fundamentals of Business Analytics	3:0:0
21	20CA2018	Big Data Analytics	3:0:0
22	20CA2019	Big Data Analytics Lab	0:0:2
23	20CA2020	Data Mining and Data Warehousing	3:0:0
24	20CA2021	Data Analysis and Visualization	3:0:0
25	20CA2022	Data Visualization Lab	0:0:2
26	20CA2023	Machine Learning	3:0:0
27	20CA2024	Machine Learning Lab	0:0:2
28	20CA2025	Data Security	3:0:0
29	20CA2026	Data Security Lab	0:0:2
30	20CA2027	Professional Ethics	3:0:0
31	20CA2028	Predictive Analytics	3:0:0
32	20CA2029	Artificial Intelligence for Data Science	3:0:0
33	20CA2030	Operating Systems Security	3:0:1
34	20CA2031	Cyber Crimes and Cyber Security	3:0:0
35	20CA2032	Information Security	3:0:0
36	20CA2033	Cyber Forensics	3:0:0
37	20CA2034	Cyber Forensics Lab	0:0:2
38	20CA2035	Computer Networks and Network Security	3:0:0
39	20CA2036	Computer Networks and Network Security Lab	0:0:2
40	20CA2037	Database Security	3:0:0
41	20CA2038	Database Security Lab	0:0:2
42	20CA2039	Biometric Security	3:0:0
43	20CA2040	General Forensic Science	3:0:0
44	20CA2041	Malware Analysis and its Security	3:0:0
45	20CA2042	Security Assessment of Information Systems through Ethical Hacking	3:0:0
46	20CA2043	Ethical Hacking Lab	0:0:2
47	20CA2044	Cyber Security Governance	3:0:0
48	20CA2045	Security of Web Applications	3:0:0
49	20CA2046	Data Mining in Cyber Security	3:0:0
50	20CA2047	Email and Mobile Forensics	3:0:0
51	20CA2048	Python for Network and Security	0:0:2
52	20CA2049	Python for Network and Security Lab	3:0:0
53	20CA2050	Cloud Security	3:0:0
54	20CA2051	Cloud Security Lab	0:0:2

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Sl. No.	Course Code	Course Title	Credits
55	20CA2052	Information Security Ethics	1.00
56	20CA3001	Cyber Criminology and Criminal Justice Administration	4.00
57	20CA3002	Information Security Management	3.00
58	20CA3003	Network Security	3.00
59	20CA3004	Network Security Lab	0.02
60	20CA3005	Cyber Law	4.00
61	20CA3006	Digital Forensics	3.00
62	20CA3007	Digital Forensic Lab	0.02
63	20CA3008	Web Application Security	3.00
64	20CA3009	Advanced Digital Forensics	3.00
65	20CA3010	Advanced Digital Forensic Lab	0.02
66	20CA3011	Business Continuity and Disaster Recovery Management	3.00
67	20CA3012	Database Security Management	3.00
68	20CA3013	Database Security Management Lab	0.02
69	20CA3014	Information Security Governance, Risk and Compliance	3.00
70	20CA3015	Internet of Things Security	3.00
71	20CA3016	Artificial Intelligence Security	3.00
72	20CA3017	Economic Offences	3.00
73	20CA3018	Ethical Hacking	3.00
74	20CA3019	Ethical Hacking Lab	0.02
75	20CA3020	Python for Cyber Security	3.00
76	20CA3021	Python for Cyber Security Lab	0.02
77	20CA3022	Security in the Cloud	3.00
78	20CA3023	Security in the Cloud Lab	0.02
79	20CA3024	Social Media Crimes	3.00
80	20CA3025	Digital Security	3.00

## Semester IV

Sl. No.	Course Code	Course Title	Credits
1		Elective – I	
2		Elective – II	3:0:0
3		Elective Lab	3:0:0
4	PSP3998	Part Semester Project	0:0:2
		OR	0:0:12
	FSP3999	Full Semester Project	
		<b>Total</b>	0:0:20
			<b>20</b>

## Credit Distribution

Sl.No.	Course Component	Credits
1	Programme Core	72
2	Electives	8:0
3	Part Semester Project/Full Semester Project	12/20
	<b>Total Credits</b>	<b>92</b>

\* Including online courses (offered by NPTEL, SWAYAM, Coursera) from II to V semesters.

## LIST OF NEW COURSES

Sl. No.	Course Code	Course Title	Credits
1	19CA3001	Data Mining Techniques	3:0:0
2	19CA3002	Machine Learning for Image Processing	3:0:0
3	19CA3003	Artificial Intelligence for Big Data	3:0:0
4	20CA2001	Computational Thinking for Problem Solving	3:0:0
5	20CA2002	Problem Solving using Programming	3:0:0
6	20CA2003	Problem Solving Lab	0:0:2
7	20CA2004	Fundamentals of Information Technology	3:0:0
8	20CA2005	Computer Fundamentals Lab	0:0:3
9	20CA2006	Foundation of Data Science and Analytics	3:0:0
10	20CA2007	Foundation of Data Science and Analytics Lab	0:0:2
11	20CA2008	Essentials of Python Programming	3:0:0
12	20CA2009	Programming in Python Lab	0:0:2
13	20CA2010	Python for Data Science and Analytics	3:0:0
14	20CA2011	Python for Data Science and Analytics Lab	0:0:2
15	20CA2012	Data Structures	3:0:0
16	20CA2013	Data Structures Lab	0:0:3
17	20CA2014	Database Management System	3:0:0
18	20CA2015	Database Management System Lab	0:0:2