



PART B

Criterion 1 – Curricular Aspects

Key Indicator – 1.1 Curricular Planning and Implementation

1.1.1 – SAMPLE SUPPORTING DOCUMENTS



1.1. Supporting Sample Documents

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IQAC FORMULATION CIRCULAR

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai – 400 050.

Ref. : CRCE / 2022 / 264A

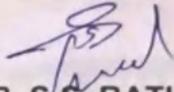
Date : July 20, 2022.

CIRCULAR

An Internal Quality Assessment Cell (IQAC) has been constituted with the following members as per NAAC guidelines :

- | | | |
|--|---------------|-------------------------------|
| 1. Chairman | Principal | - Dr. Surendrasingh S. Rathod |
| 2. Member of Management | Director | - Fr. Valerian D'Souza |
| 3. Co-ordinator | Professor | - Dr. Sunil Surve |
| 4. Senior Administrative Officer | HoD (Comp) | - Dr. Sujata Deshmukh |
| 5. Senior Administrative Officer | HoD(AI & DS)- | Dr. Jagruti Save |
| 6. Senior Administrative Officer | HoD (ECS) | - Dr. Sapna Prabhu |
| 7. Senior Administrative Officer | HoD (Mech) | - Dr. Bhushan Patil |
| 8. Senior Administrative Officer | HoD (H&S) | - Prof. Dileep Chandra Nair |
| 9. Member – Programme Co-ordinator (Comp) | | - Prof. Monika Khanore |
| 10. Member – Programme Co-ordinator (AI& DS) | | - Prof. Garima Thripathi |
| 11. Member – Programme Co-ordinator (ECS) | | - Prof. Shilpa Patil |
| 12. Member – Programme Co-ordinator (Mech) | | - Dr. Vasim Sheikh |
| 13. Member – Programme Co-ordinator (H&S) | | - Prof. Prasad Lalit |
| 14. Nominee of the Student - General Secretary | | - Mr. Anthony Benno |
| 15. Alumni | | - Mr. Mihir Karkare |
| 16. Employer's Nominee | | - Mr. James Maslamani |
| 17. Nominee from Industry | | - Mr. Lester Fernandes |
| 18. Stakeholder's Nominee (Parent) | | - Ms. Vishakha Fernandes |
| 19. NAAC and NBA Convener | | - Prof. Prashvi Shah |
| 20. NIRF Co-ordinator | | - Prof. Supriya Kamoji |

All concerned are requested to note the above.


(DR. S. S. RATHOD)
PRINCIPAL





IQAC -MINUTES OF THE MEETING

**FR. CONCEICAO RODRIGUES COLLEGE OF ENGG.Fr. Agnel Ashram,
Bandstand, Bandra (W) Mumbai 400 050.**

Minutes of Meeting - Internal Quality Assurance Cell (IQAC)

The IQAC meeting was conducted on Saturday, 7th August 2021 at 11.30a.m online on Google meet platform. Dr. Srija Unnikrishnan chaired the meeting.

The following members were present:

1. Fr. Valerian D'Souza
2. Dr. Srija Unnikrishnan
3. Dr. D.V.Bhoir
4. Dr. Bhushan Patil
5. Dr. V.S.Jorapur
6. Mr. D.S.S.Sudhakar
7. Mr. Lalit Prasad
8. Dr. Vasim Shaikh
9. Ms. Shilpa Patil
10. Mrs.Kranti Wagle
11. Ms. Garima Tripathi
12. Mr. Lester Fernandes
13. Mr.Ninad Shetty
14. Dr. Sunil Surve

Item no.1	Confirming minutes of meeting held on 5th October,2019. Rv.Fr.Valerian D'souza welcomed the members present.Fr. Valerian mentioned that due to the pandemic the IQAC meeting has been scheduled online. Dr. Sunil Surve read out the minutes of the last meeting held on 5th October 2019.
Item no.2	Action taken report based on recommendations. Dr. Surve informed the members that according to the recommendations received in the last meeting following actions were taken: 1. Training of faculty in thrust areas. Dr. Surve informed the members that many of the faculty members have attended online courses in the thrust area and the faculty members are enrolling themselves for new courses teacher. 2. Syllabus of Electronics & Computer Science. Dr. Surve informed the members that suggestions given by IQAC members were forwarded to the Syllabus Committee for the department.
Discussion	

Date: 09/08/21



IQAC -MINUTES OF THE MEETING...

FR. CONCEICAO RODRIGUES COLLEGE OF ENGG.Fr. Agnel Ashram,
Bandstand, Bandra (W) Mumbai 400 050.

Item no.3	Inclusion of HOD's in IQAC committee
Discussion	Dr. Surve informed the members that as suggested by Rv.Fr.Valerian D'souza in last meeting the Head of departments are included in IQAC committee.
Item4	Status of AQAR(NAAC) submission
Discussion	<p>Dr. Surve informed the members that the AQAR is the Annual Quality report which was submitted to NAAC. It consists of seven points and only point no. 2 and 6 are left to be uploaded. Sir briefed the members about the AQAR submission process and informed the members that the format has changed with respect to last year.</p> <p>Mr. Lester asked whether the AQAR can be made available to the members of IQAC. Dr. Surve informed that since there is some sensitive data in the AQAR it cannot be circulated. But the basic SSR report would be circulated among the members of IQAC.</p> <p>Mr.James asked whether the AQAR is really needed for the members and suggested that there is no need to share the complete data.</p>
Item no.5	Approval of IQAC events to be organized.
Discussion	<p>Dr. Surve presented the list of events to be organized by IQAC.</p> <ol style="list-style-type: none">1. Seminar on Universal Human Values. <p>Dr. Srija Unnikrishnan informed the members that AICTE has now made it mandatory for all faculty members to undergo the "Universal Human Values " program in order to introduce human values as a part of our technical education. She further mentioned that Prof. Garima Tripathi would be take an introductory session on UHV as she has undergone a five day training program on UHV.</p> <ol style="list-style-type: none">2. Faculty development program on NAAC process. <p>Dr. Surve informed the members that in order to update the faculty members about the NAAC process one event has been planned.</p> <ol style="list-style-type: none">3. Lecture series on upcoming Technologies <p>Dr. Surve informed the members that a lecture series on upcoming technologies would be organized for second and third year students. He said initially some introductory lectures will be organized.</p> <p>Prof. Garima Tripathi suggested taking preferences from students for their area of interest and then plan lecture series for them. Adding on to this Dr. Srija suggested forming a special interest group in college where students can meet ,collaborate according to their interests.</p> <p>Mr. Mihir suggested planning events for financial management also.</p>

Date: 09/08/21



IQAC -MINUTES OF THE MEETING...

FR. CONCEICAO RODRIGUES COLLEGE OF ENGG.Fr. Agnel Ashram,
Bandstand, Bandra (W) Mumbai 400 050.

Dr. Jagruti Save and Mr. Vikram Dingra suggested organizing events on career counselling.

Mr.Ninad Shetty mentioned that it would be helpful for students to be a part of a Special interest group.

4. Stress Management

Dr. Surve mentioned that the Stress Management event is planned for students as well as faculty .

5. How to create interactive video lectures.

Dr. Surve suggested that every faculty should make their interactive video lectures according to students' requirements.

Mr. Lester informed that a lot of MOOC videos are available online and faculty can make good use of them.

6. College life to Corporate life

Event where industrial visits could be planned.

7. Entrepreneurial journey

Dr. Jorapur mentioned that rather than taking sessions on the above topic,students can be sent for training by EDP where they get hands-on experience.

8. Innovation and Entrepreneurship

To develop an innovative mindset and understand Entrepreneurship.

Item no.6

Any other matter with permission of chair

1. Dr.Srija asked Dr.Surve to modify the mechanism formulated for the identification of slow and advanced learners according to the current scenario.

2. Mr.Lester suggested making use of ATAL platform for startups and funding projects through government bodies.Dr.Jorapur informed that college is trying to register through ASI but there were some glitches while registering for the same.

3. Rv.Fr.Valerian D'souza suggested that there should be some event organized for Industry Connect.

4. Dr.Bhushan Patil gave a proposal for conducting a webinar for faculty on scopus index publication.

Meeting ended with the vote of thanks by Dr.Srija Unnikrishnan.

Dr. Sunil Surve

IQAC-Head

Date: 09/08/21



MINUTES OF THE INSTITUTE LEVEL MEETING

2

**MINUTES OF THE ONLINE FACULTY MEETING HELD ON
31ST JULY 2021 ON ZOOM PLATFORM**

Principal, Dr. Srija Unnikrishnan, welcomed all the faculty members.

1. Principal informed members that the Academic Calendar for the current semester from University is awaited.

With 15 working weeks in the Semester, the academic schedule is decided as follows :

TE, BE	:	Start of term	-	12 th July 2021
		End of term	-	23 rd October 2021
		Unit Test 1	-	17 th , 18 th , & 20 th August 2021
		Unit Test 2	-	11 th , 12 th & 13 th October 2021
SE	:	Start of term	-	23 rd August 2021
		End of term	-	4 th December 2021
		Unit Test 1	-	27 th , 28 th , & 29 th September 2021
		Unit Test 2	-	22 nd , 23 rd & 24 th November 2021

Student Council for 2021-22 has been elected and they are in the process of deciding the student activities for the semester.

Student chapter councils for the academic year are being formed.

2. Principal reminded faculty of some important points regarding conduct of online classes.
 - Online classes are to be conducted only through laptop / desktop with necessary accessories. Classes should not be taken on mobile.
 - Classes have to be recorded and the links for the same shared with students and HOD. Students should be able to access all classes held in the Semester.
 - Making available / distributing additional learning material to students is desirable.
 - Recordings of previous Semesters need to be preserved. If there is shortage of space on the drive, one option is to create an unlisted youtube channel and upload the recordings. The links for the same should be made available for viewing, on demand by higher authorities / inspection committees.
 - To ensure that outside candidates do not enter the Google classroom, it is mandatory to populate the calendar with mail ids of students in the classroom.
3. Practical sessions should be made interesting and motivating for students and designed to make students proficient in domain knowledge. This is necessary to make our students competent for placements in these challenging times.

Minimum of one Innovative lab experiment should be implemented per subject.
4. College has procured Zoom license with capacity of 500. The platform will be managed by Dr. D.V. Bhoir (Program Approval) and Dr. Nilesh Patil (Administrator).

...2/-



MINUTES OF THE INSTITUTE LEVEL MEETING ...

: 2 :

The same can be used for any programme with precautions taken to ensure that no outside candidates can enter the meeting room through the link passed on to them. The mail ids of registered / expected participants need to be pre-entered. The Programme Co-ordinator should mute the audio and video of all participants during the programme and enable only the audio of those participants who raised hand during the Q & A slot. The Programme Co-ordinator should be continuously monitoring the programme. If any untoward behaviour / happening is observed, the programme should be closed immediately.

5. The Staff In-charges list is ready with few changes from last year. Principal mentioned that 'Programming team' has been added to enhance the digital facilities, for smooth functioning in today's online era. Also, liaison with University is very necessary for getting the necessary approvals / clearances in time.
6. IQAC should organize events with focus on quality enhancements. This year, for any expenses involved, proposals need to be pre-approved. Next year, provision for the same can be included in the budget.
7. Prof. Swati briefed members on the NISP Policy and implementation initiatives.
8. Dr. Bhoir explained the scope of MOU for Linux Certification and Prof. Prajakta Bhangale explained that of Cyber security certification.
Principal informed that all faculty members in turn, should undergo the course on UHV (Universal Human Values) conducted by AICTE. Prof. Garima Tripathi and Prof. Sunil Chaudhari gave very good feedback about the course. Prof. Garima Tripathi will conduct an introductory session for faculty on the same.

Principal thanked all faculty members for attending the meeting and their active participation.

(DR. SRIJA UNNIKISHNAN)
PRINCIPAL



MINUTES OF MEETING WITH HEAD OF DEPARTMENTS

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050.

MINUTES OF THE INSTITUTIONAL LEVEL MEETING HELD ON
29TH AUGUST 2022 AT 2.30 PM AT THE CONFERENCE ROOM, 5TH FLOOR

PRESENT:	Fr. Valerian D'Souza	- Local Superior
	Fr. Eleuterio Fernandes	- Assistant Director
	Fr. Trevor Pereira	- Administrator, Balbhavan & Fr. Agnel School
	Dr. Surendra Singh Rathod	- Principal, CRCE
	Dr. Bhushan Patil	- Head, Prod. / Mech. Engg. Dept.
	Dr. Sujata Deshmukh	- Head, Computer Engg. Dept.
	Mr. Dileep Chandra C.	- Head, Hum. & Sci. Dept.
	Mr. Mahesh Sharma	- System Administrator
	Mr. C.B. Shetty	- Registrar
	Mr. Robert Luzar	- Sr. Clerk / Asst. Accountant

Rev. Fr. Valerian welcomed the members to the Institute Level Meeting.

The meeting proceeded as per the agenda :

1. Principal read out the minutes of the previous Institute Level Meeting and the following points are reviewed:
 - Mahesh Sharma informed the meeting about the broad plan and requirements for upgrading campus WIFI, The bandwidth requirements for the Campus was briefly discussed.
 - Mahesh Sharma informed that Centralized Storage Server has been already budgeted in the financial year 2022-23 but the budgeted amount may not be sufficient due to changes in the academic and administrative requirements.
 - Principal informed that HODs meeting with ERP vendor has been conducted and majority of the members have an opinion of not procuring the ERP solution immediately.
 - Dileep Chandra informed that the draft copy of the Prospectus is received and proof reading is on progress.
 - Principal informed about the arrangements required for the admission process. After discussion, following were approved:
 1. Zoom large meeting license for 3 months
 2. Carpet for waiting lobby & counselling room
 3. Signage Digital Display
 4. A/c units in Internet center
 5. Procurement of 12th student databasePrincipal informed that PR in-charge is posting relevant messages in the social media for improving branding of the Institution. He also informed that online application form S/w is ready & has been tested.
 - Principal informed that the Academic calendar is ready and department wise FDP schedule is being finalized.
 - Principal informed the members that approximately 90% of the third-year students have opted for minors / honors degree programme offered by the College. He also informed that, as a value addition the following initiatives are being taken by the College:
 1. MOU with Crypto University
 2. Student Chapter for Aeronautical Society
 3. Guest lectures / training programmes in Fire & Safety
 - Director instructed to follow up the fee collection with the students / parents.



MINUTES OF MEETING WITH HEAD OF DEPARTMENTS ...

: 2 :

2. Principal presented a draft copy of Research Promotion & IRG Policies and explained the benefits and need of the same. After brief discussion, director instructed to hold a separate meeting with senior faculties, more deliberations & brain storming is required to finalize the policies.
3. Principal informed the need for the preparation of ICAC'3 biannual conference to be held in next year. Director instructed to initiate the needed steps at the earliest.
4. Principal explained the prerequisites for obtaining the academic autonomy for the College. He told minimum 3 courses have to be NBA accredited or Institute has to be accredited with A Grade by NAAC apart from having permanent affiliation by the University. Since we have received B++ grade from NAAC, either we can opt for upgrading process to improve the grade or make fresh application after the expiry of current accreditation. It was decided to take up the discussion in the next meeting.
5. Principal informed that the process for applying to NBA for Computer Engineering department accreditation is proceeding as per the schedule. It was also decided to enquire whether ECS can proceed for accreditation, since it is the name change of branch Electronics to ECS.
6. Principal highlighted the need for infrastructure repair & maintenance and in principle all the members agreed about the same. Director asked members to submit a proposal. Director also informed that the admin floor plans are ready and management is negotiating with contractors & will be finalized soon.
7. Director instructed to submit a concrete plan about the utilization of open spaces (new wing closed toilets).
8. Principal & Director informed all the members, especially HODs that the intent of the management, in accordance with the UGC/University recommendations, to use 360 feedback system during the faculty performance evaluation. Also, they were asked to call a departmental meeting and explain the points covered in the said feedback system.
9. Mahesh Sharma explained that the existing bandwidth availability and requirements. After discussion it was decided to increase the bandwidth in phased manner along with replacement of intermediate active & passive components.
10. Principal explained the current model of industrial visits followed by the students. Both Principal & Director suggested to take only a one-day Industrial visits.
11. Any other business with the permission of the Chair :
 - Director instructed the Registrar to rigorously follow up the pending permanent affiliation with the University.
 - Principal informed the members about the resignation of Dr. Vijay Bilolikar. Director asked the members to suggest suitable senior member to take over the responsibilities held by Dr. Bilolikar.
 - Director informed the members that management will be finalizing contractor for both Machine shop and student work area repairs.

There was no other item for discussion.

 ... 3/-



SAMPLE DEPARTMENT ADVISORY BOARD FORMATION.

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
Department of Computer Engineering
For Academic Year 2021-2022
DAB Meeting Information and Agenda

Ref: CRCE/COMPS/2021_22/DABM/7

Date of meeting: 10th September 2022, Venue: Online-Google meet

DAB is scheduled on 10th September 2022 at 11am using Online Platform Google Meet.

Following are the Members of DAB committee.

Sr. No.	Name of DAB Member	Designation	Representation
1	Dr. Surendra Rathod	Principal, Fr.CRCE, Bandra, Mumbai	Management Representation
2	Dr. Abhijit Joshi	Professor, Computer Department, D.J. Sanghavi College of Engineering, Mumbai	External Expert-Academics
3	Mr. Sameer Ranade	TCS	Employer
4	Ms. Ipsita Bhattacharya	Business Analyst at JPMorgan	Alumni and Domain Expert – Business Intelligence
5	Mr. Kartik Hariharn	Sr. Machine Learning Engineer, Quantiphi Analytics Solution Private Limited	Alumni and Domain expert – AI and ML, Computer vision
6	Ms. Joshua koyeerath	AWS -Security	Alumni and Domain expert AWS -Security
7	Mr. Sushant Patil	Scientific officer, BARC	Parent Representation
8	Dr. Sujata P. Deshmukh	HOD, Computer Engineering, FRCRCE	HOD
9	Dr. S. K. Surve	IQAC Chairman, FRCRCE, Bandra	IQAC
10	Prof. Monika Khanore	Program Coordinator, FRCRCE, Bandra	PC
11	Prof. Merly Thomas	DQAC committee member, FRCRCE, Bandra	DQAC committee member

Agenda

1. To discuss Vision, Mission , PEOs and PSOs
2. To get inputs from experts about the actions to be taken with reference to teaching learning process
3. To discuss the assessment of the attainment of Program Outcomes, Program Specific Outcomes
4. To discuss Quality Improvement on online/offline academic processes

HOD

(Dr. Sujata P. Deshmukh)
Computer Engineering, Fr.CRCE



MINUTES OF MEETING - DEPARTMENT ADVISORY BOARD

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING

Fr. Agnel Ashram, Bandra, Mumbai 400 050

Department of Computer Engineering

Minutes of the DAB Meeting

Ref: CRCE/COMPS/2022_23/DABM/7

Agenda

1. To discuss Vision, Mission, PEOs and PSOs
2. To get inputs from experts about the actions to be taken with reference to teaching learning process
3. To discuss the assessment of the attainment of Program Outcomes, Program Specific Outcomes
4. To discuss Quality Improvement on online/offline academic processes

The meeting was held on 10th September, 2022 at 11.00am on Google Meet. Following members were present for the meeting:

1. Dr. Sujata Deshmukh- HoD, Computer Engineering Dept, CRCE
2. Dr. Sunil Surve- Faculty, CRCE
3. Prof. Merly Thomas- Faculty, CRCE
4. Prof. Monca Khanore- Faculty, CRCE
5. Prof. Roshni Padate- Faculty, CRCE
6. Prof. Kalpana Deorukhkar- Faculty, CRCE
7. Dr. Abhijit Joshi- Professor, DJSCE
8. Mr. Sameer Ranade- TCS
9. Mr. Shrinivas Patankar- Parent
10. Mr. Joshua Koyeerath- Alumnus
11. Mr. Joshua Noronha- Alumnus
12. Mr. Kartik Hariharan- Alumnus
13. Mr. Hanoz Darukhanawala- Alumnus
14. Mr. G. P. Joshi- Industry Expert

Dr. Sujata Deshmukh, who chaired the meeting, introduced, and welcomed the guests. She then shared the agenda with the members followed by an overview of the department and its activities with the members. Dr. Deshmukh then shared the feedback given by the NBA committee during the previous visit. The department is in the process of revising its Vision, Mission, Programme Education Objectives (PEOs) and Programme Specific Outcomes (PSOs). The DAB members discussed the proposed Vision, Mission, PEO and PSO statements of the department, followed by the quality improvements in teaching Learning process and academic processes.



MINUTES OF MEETING - DEPARTMENT ADVISORY BOARD ...

Agenda 1: To discuss Vision, Mission, PEOs and PSOs

Dr. Sujata Desmukh informed that the department is in the process of articulating the Vision, Mission, PEOs and PSOs of the department and requested inputs in this regard from the board members. She presented the previous and the proposed vision and mission of the department. All DAB members were satisfied with both the vision and mission statement. Mr. Sameer Ranade suggested to include 'diversity' in the statements. Mr. Joshua Koyeerath said that inclusion of 'innovative ideas in different domains of technology' in the mission will improve the statements. As per Mr. Shrinivas Patankar's suggestion, we should include 'cyber security'.

All DAB members agreed that the PEO statements were well written. It was decided that the PEO statements need not be rearticulated.

Mr. Sameer suggested to incorporate 'metaverse' in one of the PSO statements. Prof. Merly Thomas believed that most of the subjects' Course outcomes will not match with the proposed PSO statements. According to Mr. Abhijit Joshi, 'computing' is missing in the statements while Mr. Kartik Hariharan recommended inclusion of 'research base or analytics'. Mr. Hanoz Darukhanawala suggested to include 'development of tools' in the second PSO statement.

Agenda 2: To get inputs from experts about the actions to be taken with reference to teaching learning process

Agenda 4: To discuss Quality Improvement on online/offline academic processes

In view of the upcoming NBA visit to the department, Dr. Deshmukh expressed her concern regarding the quality of teaching-learning process. On this issue, the DAB members suggested that

1. Nurture the professors also with the cutting-edge technologies.
2. Bookish knowledge and practical knowledge are totally different, necessitating practical training for teachers.
3. This can be achieved by having a tie up with local agencies which are expert in these technologies, so the teachers can get an opportunity to work with them.
4. For Mini Projects, department should have a tie up with companies and make the students work on something required by the company, thereby, giving the students real world practice.
5. Encourage the students to write good quality codes and participate in the Hackathons.
6. Motivate the students to contribute to some open-source projects.

For improving the industry-institute interaction, following suggestions were given by the Board members:

1. For funded projects, approach the companies that train students with stipend.
2. Encourage students to visit industry exhibitions so that they can interact with the industry people.
3. Reach out to companies that collaborate if they find benefit from the students.
4. Improve college website with the help of students and highlight it on the website.
5. Keep website development competition.
6. Showcase all good activities of the department on the website.
7. Networking can be improved by providing students with college mail ids.



MINUTES OF MEETING – DEPARTMENT ADVISORY BOARD ...

8. Train students on cyber security and make an internal team of students and faculty. Let them hack the website to make it more secure.
9. Dr. Deshmukh pointed out that the recruiting companies insist on students starting their internships during the final semester itself. The DAB members opined that if students have only one subject in the final semester, they can get time to do longer internships. Dr. Surve expressed his concern regarding the availability of internships if all Computer Engineering students across the University must undergo internship in the final semester.

The meeting ended with vote of thanks by Dr. Deshmukh.



PROGRAM ASSESSMENT COMMITTEE MEETING CIRCULAR

Fr. Conceicao Rodrigues College Of Engineering

Dept of Information Technology

CRCE: 05/07/2021

Subject: PAC MEETING

Programme Assessment Committee (PAC) is scheduled to be held on 10/07/2021 at 9.30 am at HOD cabin to discuss the following matters.

1. Formation of Academic Calender
2. Assessment of CO-PO MAPPING.
3. BE project related activites

Program Coordinator

Garima Tripathi (I.T dept)

Sr.no	Name	Signature
1.	Dr. Jagruti Save	
2.	Mrs. Garima Tripathi	
3.	Mr. Vaibhav Godbole	
4.	Mrs. Prachi Patil	
5.	Mrs. Sarika Davare	
6.	Mrs. Prajakta Dhamanskar	
7.	Mrs. Prajakta Bhangale	
8.	Mr. Saurabh Kulkarni	
9.	Dr. Nilesh Patil	
10.	Mr. Unik Lokhande	
11.	Ms. Kranti Wagle	
12.	Ms. Parshvi Shah	

Copy to: Mrs. Jagruti Save, HOD I.T dept



PROGRAM ASSESSMENT COMMITTEE

Fr. Conceicao Rodrigues College Of Engineering

Dept of Information Technology

CRCE: 05/02/2022

Subject: PAC MEETING

Programme Assessment Committee (PAC) is scheduled to be held on 9/02/2022 at 10.45 am at HOD cabin to discuss the following matters.

1. Reformation of PAC committee

Program Coordinator

Garima Tripathi (I.T dept)

Sr.no	Name	Signature
1.	Dr. Jagruti Save	
2.	Mrs. Garima Tripathi	
3.	Mr. Vaibhav Godbole	
4.	Mrs. Prachi Patil	
5.	Mrs. Sarika Davare	
6.	Mrs. Prajakta Dhamanskar	
7.	Mrs. Prajakta Bhangale	
8.	Mr. Saurabh Kulkarni	
9.	Mr. Unik Lokhande	
10.	Ms. Kranti Wagle	
11.	Ms. Parshvi Shah	

Copy to: Mrs. Jagruti Save, HOD I.T dept

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
DEPARTMENT OF INFORMATION TECHNOLOGY

Minutes of Meeting Date: 10/2/22

The meeting started on 9th Feb 2022 in presence of Mrs. Garima Tripathi and all members of PAC to discuss the points mentioned in agenda.

Following points were discussed and finalized in the meeting.

- 1> Programme Assessment Committee needs to be reformed by adding two new members.
- 2> The newly formed committee members are as follows:
- 3> PAC chair - Mrs. Garima Tripathi
PAC members
Prachi Patil
Mrs. Sarika Davare
Mr. Saurabh Kulkarni

Dr. Jagruti Save
HOD-IT

Mrs. Garima Tripathi
Chair-PAC



MINUTES : PROGRAM ASSESSMENT COMMITTEE MEETING

**FR. CONCEICAO RODRIGUES COLLEGE OF ENGG.
Fr. Agnel Ashram, Bandstand, Bandra (W) Mumbai 400 050.
Departmental Meeting**

A meeting of PAC was held on 10th July 2021 at 9.30 am in the staff room

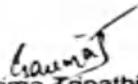
Following Members were present.

1. Ms. GarimaTripathi
2. Ms. SarikaManojDavare
3. Ms. PrajaktaMandarDhamanskar
4. Ms.PrachiPatil

Following Points were discussed.

1. Each and every faculty should maintain course diary for their individual subject and also PAC sheets should be used for assignments,unit tests and labs.Labs and Lectures should be left on time.
2. Whenever any faculty takes a leave he or she has to do prior adjustment of lectures and labs and also get it signed beforehand.
3. New lab incharges were allotted
For 801-Unik sir
802-Nilesh sir
803- Sarikamaam
804-Prajakta B
And at the end of semester they have to prepare poster or charts for the lab.
4. Every faculty has to submit the weekly report of their subject to the class teacher.
5. FDP was suppose to be organized in august but as there was no resource person available.So it was decided that it should be organized at the end of semester and the suggested topic for FDP is cryptography.After a brief discussion it was suggested to search for the resource person.
6. STTP program is planned in the first week of January for one or two weeks so after a discussion about STTP it was decided to think for the topic as well as for coordinators.
7. As fourth sem results will be declared so all the faculties should keep the track of how many KTS students have got in their individual subject. Accordingly action plan should be prepared.There should not be any internal KTS. It was suggested that set the unit test question paper in such a way that weak as well as strong students can solve the paper and pass the unit test..
8. Those students who are not attending class.Faculty please inform there respective class teacher and take the follow up .
9. Mentors were assigned to the students
Nilesh sir-TE Diploma
Unik sir-students of sheetalmaam
And for Pranali and Aakansha it will be assigned later on. Also find out among SE students who do not have mentors.
10. If there is any gap in syllabus of individual subject then one should organize a guest lecture or conduct pracicals or conduct quiz for students.As some students who don't perform practicals keep them engage in activities related to labs or ask them to solve problems.

11. The BE project groups have not yet reported the project guide. They have to report weekly.It was suggested to take their contact no and take the follow up.Also ask them to participate in competitions, to do literature survey,publish atleast one paper.
12. About palgarism ask principal maam.
13. General discussion about npTEL courses


Mrs. Garima Tripathi
Program Coordinator



SAMPLE PROGRAM ASSESSMENT COMMITTEE EVALUATION SHEET

<u>Fr. Conceicao Rodrigues College of Engineering</u>			
<u>PAC - Evaluation sheet</u>			
<u>Date of Evaluation:</u>	10-02-2022		
<u>Contents:</u>	Course Outcomes/Assignment 1/Assignment 2/Lab Manual/		
<u>Subject:</u>	Big Data Analytics		
<u>Subject Teacher's Name:</u>	Saurabh kulkarni		
<u>Evaluator:</u>	Program Assessment Committee (PAC)		
<u>Suggestions given (if any):</u>	1) CO's as per syllabus. 2) Reframe question ② in accordance with Bloom's taxonomy for assignment 1 3) Assignment 2 needs no change. 4) Add 1 additional expt to cover CO 4.		
<u>Deadline for Submitting Revisions(if any):</u>	15/2/2022		
<u>Subject Teacher's Sign:</u>		<u>Evaluator(s) Sign:</u>	
<u>Re-Evaluation Date:</u>	16/2/2022		
<u>Remarks:</u>	Modifications done as per suggestions given		
<u>Subject Teacher's Sign:</u>		<u>Evaluator(s) Sign:</u>	



Society of St. Francis Xavier, Pilar's
Fr. Conceicao Rodrigues College of Engineering
Fr. Agnel Technical Education Complex Bandstand,
Bandra Mumbai -400 050

DEPARTMENT OF MECHANICAL & PRODUCTION ENGINEERING

Minutes of the Program Assessment Committee (PAC) meeting

Venue: PG Lab (403)

Date: 11th July 2022

The meeting was held by Program assessment committee (PAC) of the Production Engineering Department on 11th July 2022.

Following activities were carried out during the meeting

- Vision, Mission & PSOs for Mechanical Engineering were finalized based on the feedback suggestions received by DAB members and other stakeholders.
- The members reviewed the status of all the course files for A.Y 2021-22. Necessary suggestions were given to improve upon the course file.
- The committee reviewed CO calculations and attainments of all subjects for previous academic year.
- The committee requested all the teachers to set unit test question papers keeping in view the Bloom's Taxonomy.
- Individual subject teachers were asked to prepare and share the lesson plan before the commencement of the semester.

Dr. Vasim A. Shaikh

Program
Coordinator

Member of PAC

Prof. D. S. S. Sudhakar

Member of PAC

Dr. Ketaki Joshi

Member of PAC

Dr. Bhushan. T. Patil

Head of Dept.

(Mechanical/Production
Engg)



Fr. Conceicao Rodrigues College Of Engineering

INSTITUTE ACADEMIC CALENDAR



Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai
(Afiliated to University of Mumbai)
Academic Calender (AY 2022-23)

Week	Dates	Event	Committee/Council/Dept	Contact Person	Duration	Venue	Beneficiary
Week-1	18/7/22-24/7/22	Term Commencement for T.E. and B.E.					
		Term Commencement for S.E.- 25/7/2022					
Week-2	25/7/22-31/7/22	B.E. Project proposal Selection and Approval- 29/7/2022	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.	1 Day		B.E. students
Week-3	1/8/22-7/8/22						
Week-4	8/8/22-14/8/22						
		Examination Reforms Workshop(20/8/22)	IQAC	Dr. Sunil Surve	1 Day	501	Faculty
		World Entrepreneurship Day (28/8/22)	E-Cell	Prajakta Bhangale			
Week-5	15/8/22-21/8/22	IIC Meeting- Quarter I	CRCE- IIC	Swati Ringe/ Kranti Wagle	2 Hr.	Conference Room	
		Student Council Installation(23/8/22)	Student Council	Dr. V.S.Bilolikar	2 Hr.	Samvaad	
		IIIE Seminar	IIIE	Dr. S.K.Das	2 p.m.-4 p.m.	501	
		Seminar on "Swatchh Sagar, Surakshit Sagar Abhiyan" (26/8/22)	NSS	Pradeep Singh	2 Hr.	Samvaad	
Week-6	22/8/22-28/8/22	Session on Writing Research Paper and Patent Application (26/8/22)	R & D Cell	Dr. Ketki Joshi	3 Hr.	Samvaad	TE and BE students
		National Sports Day (29/8/22)	Student Council	Dr. V.S.Bilolikar			
		B.E.Mid Term Project Assessment-1	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.	1 Day		B.E. students
		Installation - Rotract club(29/8/22)	Rotaract Club	Binsy Joseph	12 p.m-3 p.m.	Samvaad	
		Session on " Problem Solving and Ideation "(30/8/22)	GDSC	Kalpna Deorukhkar	10 a.m. -12 p.m.	Samvaad	All Students
Week-7	29/8/22-4/9/22	Mid Term Break-31/8/2022 to 4/9/2022					
		SAR/SSR/IIQA information(5/9/22)	IQAC	Dr. Sunil Surve			
		Teacher's Day Celebration (5/9/22)	NSS	Pradeep Singh			
		ZEAL(8/9/22)	Student Council	Dr. V.S.Bilolikar	3 p.m.- 6 p.m.	Classrooms	All students
		Binary Talks(9/9/22)	Codelabs	Roshni Padte	11 a.m.-12 p.m.	Samvaad	
		Intra Carrom and T.T.(10/9/22 - 11/9/22)	Student Council	Dr. Dipak Bauskar	10 a.m.- 5 p.m.	E.D Hall & Gymkhana	All students
Week-8	5/9/22-10/9/22	UNIT TEST 1 (SE, TE ,BE)- 5/9/22 to 7/9/22	Examination Section	Dr. D.V. Bhoir			



Fr. Conceicao Rodrigues College Of Engineering



Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai (Affiliated to University of Mumbai) Academic Calender (AY 2022-23)

		Seminar on Women's Wellness / Menstrual hygiene	Woman Development Cell	Dr. Sapna Prabhu/ Sushma Nagdeote			Only for Girl Students and Faculty
		Market Survey and Feasibility study for your business idea(13/9/22)	ACM	Sarika Davare	2.30 p.m.- 4 p.m.		
		IQAC Internal Meeting	IQAC	Dr. Sunil Surve		Conference Room	
		Workshop on "Android: Build the cross platform mobile based solution with kotlin" : (Transform your idea into working application)(12/9/22-13/9/22)	GDSC	Kalpna Deorukhkar	10 a.m.- 12 p.m.	Samvaad	All Students
		Seminar on " Introduction to Cybersecurity and Ethical Hacking (Protect your business from cybercrime)" (14/9/22)	HAWKI	Unik Lokhande	1.30 p.m.-4.30 p.m.	Online	
		Engineer's Day (15/9/22)	IEEE and WIE	Swapnali M.	1 p.m.-4 p.m.	Samvaad	
		Web and API Hacking Workshop to secure your online business and mini CTF (15/9/22-16/9/22)	HAWKI	Unik Lokhande	9 a.m.-12 p.m.	Samvaad	
		My Story : Motivational session by Entrepreneur (16/9/22)	CSI	Ashwini Pansare	2.30 p.m.- 4 p.m.	Samvaad	
		Intra Chess (17/9/22)	Student Council	Dr. Dipak Bauskar	1 Day	Library	All students
		Beach Cleanup Drive(17/9/22)	NSS	Pradeep Singh	Morning Slot	Outside College	
		AlgoHolic 1.0- Innovate, Create and Deliver (17/9/22)	Codelabs	Roshni Padte	7.30 p.m.- 9.30 p.m.	Online	
		Hackathon- Hardware	Project Cell	Vaibhav Godbole	1 Day	312	
		College Processes Explanation(17/9/22)	IQAC	Dr.Sunil Surve			
		Software Freedom Day (17/9/22)	CSI	Ashwini Pansare			
		Tree Plantation- Community Service(18/9/22)	Rotaract Club	Binsy Joseph	7 a.m.-11 a.m.	Outside College	
		Workshop on "Web Development : Build your product/service with internet based application" (16/9/22)	CSI	Ashwini Pansare			
Week-9	12/9/22-18/9/22	Workshop "Unlock your creativity"(19/9/22-20/9/22)	GDA	Heenakausr Pendhari	12 p.m.- 4 p.m.	Samvaad	



Fr. Conceicao Rodrigues College Of Engineering



Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai (Affiliated to University of Mumbai) Academic Calender (AY 2022-23)

Week-10	19/9/22-25/9/22	Workshop on "Ideations and implementation with Blockchain "(19/9/22- 20/9/22)	GDSC	Kalpna Deorukhkar	10 a.m.- 12 p.m.	108	All Students
		Technology vision 2035 and potential for innovation(21/9/22)	Codelabs	Roshni Padte	1 Hr.	Samvaad	
		Women leader's having startup idea(22/9/22)	WIE	Sushma Nagdeote	2.30 p.m.- 4 p.m.	Samvaad	
		Intra Football(24/9/22-25/9/22)	Student Council	Dr. Dipak Bauskar	2 Day	Outside College	
		Innovation and Entrepreneurship(23/9/22)	Mozilla	Prajakta Dhamnaskar	2.30 p.m.- 4 p.m.	Samvaad	
		Panel Discussion/Interactive Session on Higher studies (23/9/22)	Alumni Association of FRCR	Prachi Patil	2 Hr.	Samvaad	
Week-11	26/9/22-2/10/22	B.E. Mid Term Project Assessment-2-26/9/22	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.	1 Day		B.E. students
		Hackathon: Solve real life problems with out -of-box thinking(26/9/22- 27/9/22)	GDA/GDSC/E Cell	Kalpna Deorukhkar/Heenakaus ar Pendhari/ Prajkta Bhangale	1 Day	Samvaad	All Students
		Web Development Workshop : Build your product/service with internet based applications(30/9/22)	CSI	Ashwini Pansare	3.30 p.m-5 p.m.		
		Community Event	TedXCRCE	Monali Shetty, Prachi Patil	11 a.m.- 3 p.m.	Outside College	All Students
		India Startup Day (1/10/ 22)	Startup Cell	Dr. Jorapur/ Prachi Patil			
		Mystery- Motivational Session by succesful Innovators- CSI & IIC (28/9/22)	CSI	Ashwini Pansare			
		Week-12	3/10/22-9/10/22	Workshop on "Cloud computing"(3/10/22-4/10/22)	GDSC	Kalpna Deorukhkar	10 a.m.-12 p.m.
Seminar on "Business plan/ startup lifecycle "(4/10/22)	Rotaract Club			Binsy Joseph	3.30 p.m.-4.30 p.m.	Samvaad	
IIC Council Meeting: Review of Q1 Progress and Planning of Q2	Student Council			Swati Ringe/Kranti Wagle	2.30 p.m.-3 p.m.	Conference Room	
Workshop on "Mobile and API Hacking " and mini CTF(5/10/22- 6/10/22)	HAWKI			Unik Lokhande	1 Day	601/602/501	
CRMD (7/10/22-8/10/22)	Student Council			Dr. Hemant Khanolkar	2 Days	Samvaad	All students



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Week-13	10/10/22-16/10/22	Poster Competition on Gender Issues	Woman Development Cell	Dr. Sapna Prabhu/ Sushma Nagdeote			
		International Day for Disaster Risk Reduction (13/10/22)	FSAI	Miriyala Veerbhadra Rao			
		Session on Business Module(10/10/22)	IIIE	S.K.Das	2 p.m.-4 p.m.	Samvaad	
		World Standards Day (14/10/22)	ASME	Deepika Singh			
		National Innovation Day(15/10/22)	TedXCRCE	Monali Shetty, Prachi Patil			All Students
		eFx(11/10/22)	ASME	Deepika Singh	2 p.m.-4 p.m.	501	
		Cybersecurity Workshop(11/10/22-12/10/22)	GDSC	Kalpna Deorukhkar	10 a.m.-12 p.m.	108	All Students
		Food Festival(13/10/22-14/10/22)	NSS	Pradeep Singh	1.30 p.m.-4.30 p.m.	Basketball court	
		Rest API and Microservice(14/10/22)	ACM	Sarika Davare	6 p.m.-8 p.m.	Online	
		Workshop on "Product Solution Fit and Product Market fit"(19/10/22)	TedXCRCE	Monali Shetty, Prachi Patil			All Students
Faculty Workshop on Research , Funding and IPR	R & D Cell	Dr Ketki Joshi	3 Hr.	501	Faculty		
Week-14	17/10/22/23/10/22	Startup based event(20/10/22)	IEEE	Swapnali M.	1.30 p.m.-3.30 p.m.	Samvaad	All Students
		UNIT TEST 2- 17/10/22 to 19/10/22	Examination Section	Dr.D.V.Bhoir			
Week-15	24/10/22-30/10/22	Synergy(21/10/22- 22/10/22)	Student Council	Student Council			All Students
		HTML Bootcamp(27/10/22-31/10/22)	CodeLabs	Roshni Padte	2 Hr/ 3 Days	Samvaad	
		Community Service	Rotaract Club	Binsy Joseph	7 a.m. -11 a.m.	Outside College	
		Workshop on " Ideations and implementation with AI and ML" (25/10/22-26/10/22)	GDSC	Kalpna Deorukhkar	10 a.m.-12 p.m.	108	All Students
		Term Work Submissions Deadline- 29/10/22					
Defaulters List - 30/10/22							
Term End - 30/10/22	Examination Section	Dr. D.V. Bhoir					
Week-16	31/10/22-6/11/22	Rashtriya Ekta Diwas (National Integration Day) (31/10/22)	NSS	Pradeep Singh			
		Project Oral Examination- 4/11/22 and 5/11/22	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.			
		Practical/Oral Examination-31/10/22 to	Examination Section	Dr. D.V. Bhoir			



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Week-17	7/11/22-13/11/22	National Education Day(11/11/22)-NSS	NSS	Pradeep Singh	2 Hr.	Samvaad	
Week-18	14/11/22-20/11/22						
Week-19	21/11/22-27/11/22	Samvidhan Divas/Constitution Day (26/11/22)	Rotaract Club	Binsy Joseph			
		University Examination- 21/11/22-1/12/22	Examination Section	Dr.D.V.Bhoir			
Week-20	28/11/22-4/12/22	National Pollution Control Day (2/12/22)	NSS	Pradeep Singh	1 Hr.	Online	
		University Examination- 21/11/22-1/12/22(Sem III,V,VII) & 2/12/22 -	Examination Section	Dr.D.V.Bhoir			
Week-21	5/12/22-11/12/22	Human Rights Day (10/12/22)	NSS	Pradeep Singh			
Week-22	12/12/22-18/12/22	Design Validation with Double Diamond Approach (16/12/22)	IIC and Mozilla	Swati Ringe/ Sarika Davare	2 Hr.	Online	
		NSS Camp(17/12/22- 23/12/22)	NSS	Pradeep Singh	7 Days	Outside College	
		National Energy Conservation Day(14/12/22)	NSS	Pradeep Singh	1 Hr.	Online	
Week-23	19/12/22-25/12/22	National Mathematics Day (22/12/22)	GDSC	Kalpna Deorukhkar			All Students
Week-24	26/12/22-1/1/23	2 - Day IQAC Workshop	IQAC	Dr. Sunil Surve			
Week-25	2/1/23-8/1/23	Lesson plan and Practical Plan Template Information	IQAC	Dr. Sunil Surve			
		Athlos Inter Sports(4/1/23-11/1/23)	Student Council	Dr. Dipak Bauskar		Outside College	All Students
		IIC Council Meeting: Review of Q2 Progress and Planning of Q3	Student Council	Swati Ringe/ Kranti Wagle	2.30 p.m.- 3 p.m.	Conference Room	
		Workshop: Web site Designing for a service provider (7/1/23)	GDSC	Kalpna Deorukhkar	10 a.m.- 12 p.m.	Online	All Students
		Alumni Meet - (7/1/23)	Alumni Association of FRCRCE	Prachi Patil	5 p.m. onwards	Samvaad	Faculty and Alumni
		Ph.D. Research Progress Seminar (RPS)/ Annual Progress Seminar (APS)	R & D Cell	Dr Ketki Joshi (Mechanical) Dipali	1 Day	Dept	PhD Students
Week-25	2/1/23-8/1/23	AWS Cloud Security Workshop and Mini CTF(9/1/23)	HAWKI	Unik Lokhande	1 p.m.- 4 p.m.	Samvaad	
		Workshop on Prototype /Process Design and Development(10/1/23)	GDA	Heenakausar Pendhari	11 a.m. -2.30 p.m.	Samvaad	
		Workshop (11/1/23)	TedXCRCE	Monali Shetty, Prachi Patil	4 p.m.-8 p.m.	Samvaad	All Students



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Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai (Affiliated to University of Mumbai) Academic Calender (AY 2022-23)

Week-26	9/1/23-15/1/23	Annual Conference(13/1/23)	TedXCRCE	Monali Shetty, Prachi Patil	4 p.m.-8 p.m.	Samvaad	All Students & Outside Participants
		Coding Competition(12/1/23)	Mozilla	Prajakta Dhamnaskar	3 Hrs.	Online	
		Intra Badminton(14/1/23)	Student Council	Dr. Dipak Bauskar	1 Day	Outside College	All Students
		Alcoholic 2.0: Innovate, Create and Deliver (14/1/23)	Codelabs	Roshni Padte	7.30 p.m.-9.30 p.m.	Online	
		Yuva Diwas/ National Youth Day (12/1/23)	Rotaract Club	Binsy Joseph			
		Community Service(15/1/23)	Rotaract Club	Binsy Joseph	7 a.m. -11 a.m.	Outside College	
		Commencement of New Term-9/1/23					
		Visit to Patent Facilitation Centre	R & D Cell	Dr Ketki Joshi	1 Day		Faculty
		GDSC Hackathon : Solve real life problems with out-of-box thinking (16/1/23-17/1/23)	GDSC	Kalpna Deorukhkar	1 Day	Outside College	All Students
		Tycoon Table Debate(16/1/23-17/1/23)	E-Cell	Prajakta Bhangale	2 Days	501	
Week-27	16/1/23-22/1/23	Session on "How to plan for startup and Legal and Ethical Steps(18/1/23)	Rotaract Club	Binsy Joseph	2 p.m.-4 p.m.	Samvaad	
		Technical Event(19/1/23)	WIE	Sushma Nagdeote	1.30 p.m.-3.30 p.m.	Online	
		Workshop on Mock placement/ Blockchain(19/1/23)	IEEE	Swapnali M.			
		Intra ground Cricket and throwball(20/1/23-22/1/23)	Student Council	Dr. Dipak Bauskar	3 Days	Outside College	
		Workshop on "Graphics Designing- Logo ,UI-UX Prototyping and Brand Identity" (21/1/23)	GDSC	Kalpna Deorukhkar		Online	All Students
		BE Mid- Term Project Assessment-1	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.	1 Day		B.E. students
		Smart Contract Vulnerability Disclosure(24/1/23)	HAWKI	Unik Lokhande	1 p.m.-4 p.m.	Samvaad	
		Seminar by IIIIE(23/1/23)	IIIIE	Dr. S.K.Das	2 p.m.-4 p.m.	Samvaad	
		Workshop(25/1/23)	Project Cell	Vaibhav Godbole	1 Day	312	
		Republic Day (26/1/23)	NSS	Pradeep Singh		Samvaad	
Workshop on Ansys/Solid Works(27/1/23)	ASME	Deepika Singh	1 Day				



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Week-28	23/1/23-29/1/23	Intra Rink Boys and Girls(28/1/23-29/1/23)	Student Council	Dr. Dipak Bauskar	2 Days	Outside College	
		Data Privacy Day (28/1/23)	HAWKI	Unik Lokhande			
		Workshop on Github (28/1/23)	GDSC	Kalpna Deorukhkar	10 a.m.- 12 p.m.	Online	All Students
		Workshop on "React JS : Technology Framework that brings interactivity (Becoming the first choice of digital startups)"(23/1/23-24/1/23)	GDSC	Kalpna Deorukhkar	10 a.m.-12 p.m.	108	All Students
Week-29	30/1/23-5/2/23	Seminar/Workshop by E Cell(30/1/23)	E Cell	Prajakta Bhangale	2 Hr		
		Unscript : Solve real life problems with out-of-box thinking (4/2/23-5/2/23)	Mozilla/ Codelabs	Prajakta Dhamnaskar/Roshni Padte	1 Day		
Week-30	6/2/23-12/2/23	Workshop on Gender Awareness	Woman Development Cell	Dr. Sapna Prabhu/ Sushma Nagdeote			
		Hackathon- Solve real life problems with out-of-box thinking(8/2/23-9/2/23)	WIE	Sushma Nagdeote			Only Girl Students
		Workshop on "Python Flask : Build lightweight web applications "(6/2/23-7/2/23)	GDSC	Kalpna Deorukhkar			Samvaad All Students
		Sport's Day	Student Council	Dr.Deepak Bauskar	1 Day	Outside College	
		Unscript Rookie's Hackathon 2k23-Fuel the Imagination (11/2/23- 12/2/23)	CSI & ACM	Ashwini Pansare, Sarika Davare	2 Days	Samvaad	SE Students
Week-31	13/2/23-19/2/23	Binary Talks 2.0 (13/2/23)	Codelabs	Roshni Padte	1 Day		
		Webinar on Competitive Coding(13/2/23)	IEEE	Swapnali M.			
		Blood Donation camp(14/2/23)	NSS	Pradeep Singh	1 Day	School Auditorium	
		Understanding the phases of startup(16/2/23)	WIE	Sushma Nagdeote		Samvaad	
		Webinar/Seminar(17/2/22)	Mozilla	Prajakta Dhamnaskar	2 Hr.	Samvaad	
		Community Service	TedXRCE	Monali Shetty, Prachi Patil	11 a.m.- 3 p.m.		All Students
		Session on IPR and IP Management	R & D Cell	Dr Ketki Joshi	2 Hr.	Samvaad	
Week-32	20/2/23-26/2/23	My Story(22/2/23)	ACM	Sarika Davare		Online	
		Entrepreneurship(20/2/23)	E Cell	Prajakta Bhangale	6 p.m. -8 p.m.	Online	



Fr. Conceicao Rodrigues College Of Engineering



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Week-33	27/2/23-5/3/23	Startup Eco System(1/3/23)	TedXCRCE	Monali Shetty, Prachi Patil	2.30 p.m.- 4 p.m.	501	All Students
		Code Along(1/3/23-3/3/23)	Codelabs & GDSC	Roshni Padte	9 a.m.-11 a.m.	Samvaad	
		National Science Day (28/2/23)	GDSC	Kalpna Deorukhkar		Samvaad	All Students
		Seminar - LGBTQ	NSS	Pradeep Singh	2.30 p.m.- 4 p.m.	Samvaad	
		Workshop on "React JS: Technology framework that brings interactivity (Becoming first choice of digital startups" (1/3/23-3/3/23)	GDSC	Kalpna Deorukhkar	10 a.m.-12 p.m.	108	All Students
		National Safety Day (4/3/23)	FSAI	Miriyala Veerbhadra Rao		Outside College	
		LGBTQ Rally	NSS	Pradeep Singh	1 Day		
		Unit Test-1 (SE, TE ,BE) - 27/2/23 to 1/3/23	Examination Section	Dr. D.V. Bhoir			
Week-34	6/3/23-12/3/23	Crescendo [9/3/23- 12/3/23]	Student Council	Swapnali M.			Inter college
		Investment and Funding Opportunities for Entrepreneurs	ACM	Sarika Davare		Online	
		Women's Day (8/3/23)	IEEE/WIE	Swapnali M./ Sushma Nagdeote	1.30 p.m.-4.30 p.m.	Samvaad	
		IIC Council Meeting- Review of Q2 Progress and Planning for Q3	Student Council	Swati Ringe/Kranti Wagle	2 Hr.	Conference Room	
		Impact CTF	HAWKI	Unik Lokhande	1 Day	Samvaad	
		BE Mid- Term Project Assessment-2	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.	1 Day		B.E. students
		Flutter Festival(13/3/23-15/3/23)	GDSC	Kalpna Deorukhkar	10 a.m.- 12 p.m.	Samvaad	All Students
Week-35	13/3/23-19/3/23	Marathon HSR	Rotaract Club	Binsy Joseph			
		IQAC Event	IQAC	Dr. Sunil Surve			
		Business incubation process(13/3/23)	IIIE	Dr. S.K.Das	2 p.m.-4 p.m.	Samvaad	
		World Consumer Rights Day (15/3/23)	GDSC	Kalpna Deorukhkar			All Students
		Pitch Deck	GDSC	Kalpna Deorukhkar	2.30 p.m.- 4 p.m.	501	All Students
		Session on " Innovation /Prototype Validation Converting"	ACM	Sarika Davare	11 a.m.-1 p.m.	501	
		Stratagem(17/3/23-19/3/23)	GDA	Heenakausar Pendhari	2 Days	Conference Room	
		Panel Discussion/Interactive Session on Startup Culture (17/3/23)	Alumni Association of FRCE	Prachi Patil			



Fr. Conceicao Rodrigues College Of Engineering



Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai (Affiliated to University of Mumbai) Academic Calender (AY 2022-23)

Week-36	20/3/23-26/3/23	World Sparrow Day/ International Day of Happiness (20/3/23)	NSS	Pradeep Singh			
		Semi Code(20/3/23)	ACM	Sarika Davare	1 Day	Online	
		Photography Competition(22/3/23)	NSS	Pradeep Singh	1 Hr.	Online	
		World Water Day (22/3/23)	Rotaract Club	Binsy Joseph			
		Women Health care(23/3/23)	WIE	Sushma Nagdeote	1.30 p.m.-3.30 p.m.	501	
Week-37	27/3/23-2/4/23	Session on "Learn Start up and Minimum Viable Product/ business" (24/3/23)	CSI	Ashwini Pansare	2.30 p.m.- 4 p.m.	Samvaad	
		World Intellectual Property Day (31/3/23)	IIIE	Dr.S.K.Das	2 p.m.-4 p.m.	Samvaad	
		Webinar(31/3/23)	Mozilla	Prajakta Dhamnaskar		Online	
Week-38	3/4/23-9/4/23	Startup Based Event(29/3/23)	IEEE	Swapnali M.	10 a.m.-2 p.m.	501	
		Community Service(2/4/23)	Rotaract Club	Binsy Joseph	9 a.m.-11 a.m.	Outside College	B.E. students
		BE Project Competition in coordination with Project co ordinators (Presentation of research paper/ Patent Application)- Demo Day	R & D Cell	Dr Ketki Joshi	1 Day		B.E. students
		Resume Building Workshop(3/4/23)	TedXCRCE	Monali Shetty, Prachi Patil	2 p.m.-4 p.m.	Samvaad	All Students
		Branding for Startups(6/4/23)	Codelabs	Roshni Padte	11 a.m.-3 p.m.	Samvaad	
		Bookfair	NSS	Pradeep Singh	1 Day		
		Movie night	NSS	Pradeep Singh			Basketball court
		Internship Expo(8/4/23)	TedXCRCE	Monali Shetty, Prachi Patil	1 Day	Samvaad	All Students
		Project Orientation for TE students	Project Co-ordinators	Supriya K., Dipali K., Sangeeta P.	3 Hr.		T.E. Students
		Week-39	10/4/22-16/4/22	Euphoria	Student Council	Garima Tripathi	
Week-40	17/4/23-23/4/23	Unit Test-2 (SE,TE, BE)- 17/4/23 to 20/4/23					
		Term End(22/4/23)	Examination Section	Dr. D.V. Bhoir			
		IQAC Event	IQAC	Dr. Sunil Surve			
		World Earth Day (22/4/23)	NSS	Pradeep Singh	2.30 p.m.- 4 p.m.	Samvaad	
		World Intellectual Property Day (26/4/23)	R & D Cell	Dr. Ketki Joshi			



Fr. Conceicao Rodrigues College Of Engineering



Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai (Affiliated to University of Mumbai) Academic Calender (AY 2022-23)

Week-41	24/4/23-30/4/23	Oral/ Practical Examination- 24/4/23 to 4/5/23	Examination Section	Dr. D.V. Bhoir			
Week-42	1/5/23-7/5/23	National Technology Day(11/5/23)	CSI	Ashwini Pansare	4 Hr.	Online	
Week-43	8/5/23-14/5/23	University Examination-10/5/23 to 23/5/23 (Sem IV, VI,VIII) & 24/5/22 - 6/6/22 (Sem III,V,VII)	Examination Section	Dr. D.V. Bhoir			
Week-44	15/5/23-21/5/23						
Week-45	22/5/23-28/5/23						
Week-46	29/5/23-4/6/23						
Week-47	5/6/23-11/6/23	World Environment Day(5/6/23)	NSS	Pradeep Singh	1 Hr.	Online	
Week-48	12/6/23-18/6/23						
Week-49	19/6/23-25/6/23	International Yoga Day (21/6/23)	Student Council	Dr.V.S. Bilolikar	1 Hr.	Samvaad	All students and Faculties
Week-50	26/6/23-2/7/23	Ph.D. Research Progress Seminar (RPS)/ Annual Progress Seminar (APS)	R & D Cell	Dr. Ketki Joshi (Mechanical) Dipali Koshti (Electronics)			PhD Students
Week-51	3/7/23-9/7/23						
Week-52	10/7/23-16/7/23						

Time Table Convenor
(Archana Lopes)



Principal
(Dr. S.S. Rathod)



SAMPLE DEPARTMENT ACADEMIC CALENDAR (22-23)

FR.CONCEICAO RODRIGUES COLLEGE OF ENGINEERING, BANDRA		
DEPARTMENT OF AI&DS ACADEMIC CALENDAR: July To Nov 2022		
Sr.No.	Activity	Date
1	DQAC formation Meeting	07-07-22
2	Department Meeting with Principal	11-07-22
3	First DQAC Meeting	16-07-22
4	Faculty meeting (Department level meeting to discuss academic calendar, work distribution)	18-07-22
5	College reopens (TE)	19-07-22
6	Academic Audit (2021-22)	20-07-22
7	Faculty Appraisal	21-07-22
8	College reopens (SE)	25-07-22
9	Lesson plan/CO/CO-PO Mapping/CO Assessment Plan Submission	25-07-22
10	Lab Manual Submission	29-07-22
11	Assessment of CO, CO-PO mapping, lesson plan, lab manual by DQAC	29-07-22
12	TE Mini project Presentations (Topic Approval)	01-08-22 TO 05-08-22
13	SE AI&DS Orientation	
14	SE Mini project Presentations (Topic Approval)	08-08-22 TO 12-08-22
15	UT1 Paper Submission to DQAC	30-08-22
16	Question paper and model answer upload for Unit Test 1	30-08-22
17	Mid term break	31-08-22 to 04-09-22
18	Unit Test 1	05-09-22 to 07-09-22
19	Second Mid term mini project presentation(SE&TE)	12-09-22 TO 17-09-22
20	Mid Term Feedback	06-09-22
21	UT1 marks entry and UT1 Result analysis, List of weak students by subject teacher	18-09-22
22	Defaulter List Display	18-09-22
23	Planned dates for FDP	30-09-22 & 3-10-22
24	UT2 Paper Submission to DQAC	8-10-22 to 13-10-22
25	Question paper and model answer upload for Unit Test 1	8-10-22 to 13-10-22
26	Unit test 2	17-10-22 TO 19-10-22
27	Submission of SEM 6 department level elective choice by TE students	19-10-22 to 25-10-22
28	Conduction of orientation sessions for Sem 6 Elective subjects	20-10-22 & 25-10-22
29	SE and TE Mini Project report submission	21-10-22
31	Term work Submission	29-10-22
32	Remedial classes for weak students	27-10-22 to 29-10-22
33	Retest for internal Assessment	27-10-22 to 29-10-22
34	UT2 Marks entry	21-10-22 to 30-10-22
35	Submission	29-10-22



SAMPLE DEPARTMENT ACADEMIC CALENDAR (22-23)...

36	Term End	30-10-22
37	Practical and Oral Exams	31-10-22 to 12-11-22
38	Term Work Marks Submission	16-11-22
39	Second DQAC Meeting	18-11-22
40	University Exam (SE and TE)	21-11-22 TO 7-11-22(Sem III,V,VII) 2-12-22 -13-12-22 (Sem IV, VI,VIII)
41	End Semester department file assessment and review	28-11-22
42	CO Attainment without results	06-01-23

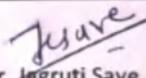
Dr. Jagruti Save
HoD AI&DS Department



SAMPLE DEPARTMENT ACADEMIC CALENDAR (21-22)

FR.CONCEICAO RODRIGUES COLLEGE OF ENGINEERING, BANDRA
DEPARTMENT OF AI & DS ACADEMIC CALENDAR: January To April 2022

Sr. No.	Activity	Date
1	College reopens	10-01-2022
2	Faculty meeting (Department level meeting to discuss academic calendar)	17-01-2022
3	Lesson plan/CO/CO-PO Mapping/CO Assessment Plan Submission	24-01-2022
4	Lab Manual Submission	27-01-2022
5	1st PAC meeting (for assessment of CO, CO-PO mapping, lesson plan, lab manual)	29-01-2022
6	1st and 2nd Assignment formulation and submission to PAC	01-02-2022
7	UT1 Paper Submission to PAC	14-02-2022
8	2nd PAC meeting (for assessment of Assignment 1 and 2, UT1 Question Paper)	15-02-2022
9	Question paper and model answer upload for Unit Test 1	25-02-2022
10	Unit Test 1	28-02-2022,02-03-2022 and 03-03-2022
11	SE Mini Project Presentation 1	05-02-2022 to 12-02-2022
12	Defaulter List submission and informing their parents by Class Teacher	11-03-2022
13	Mid Term Feedback	14-03-2022
14	UT1 marks entry and UT1 Result analysis, List of weak students by subject teacher	19-03-2022
15	SE Mini Project Presentation 2	12-03-2022 to 17-03-2022
16	Conducting classes for Weak Students	21-03-2022 to 31-03-2022
17	SE Mini Project: Project Report Rough Draft submission	04-04-2022
18	UT2 Paper Submission to PAC	11-04-2022
19	QP and Model answer upload for unit Test 2	16-04-2022
20	Unit Test 2	18-04-2022, 19-04-2022 and 20-04-2022
21	Departmental Faculty meeting (to discuss about attendance defaulters and TW defaulters)	22-04-2022
22	UT2 Marks entry	22-04-2022
23	Defaulter List submission by Class Teacher	22-04-2022
24	Submission	23-04-2022
25	SE Mini Project: Final Submission of Project Report	22-04-2022
26	Term Ends	23-04-2022
27	Practical and Oral Exams	25-04-2022 onwards
28	Term Work Marks Submission	27-04-2022
29	CO Attainment without results	27-04-2022


Dr. Jegruti Save
HoD - AI & DS Department



SAMPLE LESSON PLAN

Lesson Plan

T.E. (ECS) (Semester V)

Subject: *Software Testing & Quality Assurance*

Subject code: ECCDO 501

Teacher-in-charge: Prof. Saurabh Kulkarni

Academic Term: July – October 2021

Module No.	Unit No.	Contents	Hrs.
1		Testing Methodology	8
	1.1	Introduction to Software Testing: Introduction, Goals of Software Testing, Software Testing Definitions, Model for Software Testing, Effective Software Testing vs Exhaustive Software Testing, Software Failure Case Studies	
	1.2	Software Testing Terminology and Methodology: Software Testing Terminology, Software Testing Life Cycle (STLC), Software Testing methodology	
	1.3	Verification and Validation: Verification, Verification requirements, Validation	
2		Testing Techniques	9
	2.1	Black Box testing: boundary value analysis, equivalence class testing, state table-based testing, cause-effect graphing based testing, error guessing.	
	2.2	White box Testing Techniques: need, logic coverage criteria, basis path testing, graph matrices, loop testing, data flow testing, mutation testing, Static Testing.	
	2.3	Validation Activities: Unit validation, Integration, Function, System, Acceptance Testing.	
	2.4	Regression Testing: Progressive vs. Regressive	
3		Managing the Test Process	7
	3.1	Test Management: test organization, structure and of testing group, test planning, detailed test design and test specification.	
	3.2	Software Metrics: need, definition and classification of software matrices.	
	3.3	Efficient Test Suite Management: minimizing the test suite and its benefits	



4		Test Automation	4
	4.1	Automation and Testing Tools: need, categorization, selection and cost in testing tool,	
	4.2	Guidelines for testing tools.	
5		Testing for specialized environment	5
	5.1	Agile Testing, Agile Testing Life Cycle, Challenges in Agile Testing	
	5.2	Testing Object-Oriented Software: OOT Basics, Object-oriented Testing	
6		Quality Management	6
	6.1	Software Quality Management, McCall's quality factors and Criteria	
	6.2	ISO9000:2000, SIX Sigma	
		Total	

Course Objectives:

1. To provide students with knowledge in Software Testing techniques
2. To provide skills to design test case plans for testing software.
3. To understand how testing methods can be used in a specialized environment.
4. To understand how testing methods can be used as an effective tool in providing quality assurance concerning software.

Course Outcomes:

Upon completion of this course students will be able to:

ECCDO501.1:- Analyse the systems using the principles of software testing to prevent and remove bugs

ECCDO501.2:- Apply different software testing methods and strategies

ECCDO501.3:- Manage the test processes

ECCDO501.4:- Apply the software testing techniques in the commercial environment

ECCDO501.5:- Use the knowledge of quality attributes in software testing

CO-PO-PSO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2
ECCDO501.1	3	1												1
ECCDO501.2	3	2	3											3
ECCDO501.3	3										1			1
ECCDO501.4	3		2		3									3
ECCDO501.5	3													1



CO Assessment Tools:

Course Outcomes(CO)	Assessment Methods					
	Direct Methods (80 %)					Indirect Method (20 %)
	Unit Tests	Assignments*	Quiz	Oral	End Semester Exam (ESE)	Course Exit Survey (CES)
ECCDO501.1	30 %	20 %	20 %	10%	20 %	100 %
ECCDO501.2	40 %	---	30 %	10%	20 %	100 %
ECCDO501.3	40 %	---	30 %	10%	20 %	100 %
ECCDO501.4	40 %	---	30 %	10%	20 %	100 %
ECCDO501.5	30 %	20 %	20 %	10%	20 %	100 %

CO calculation= (0.8 *Direct method + 0.2*Indirect method)

Rubrics for Assignment:

Indicator				
Timeline (3)	More than two sessions late (0)	More than one session late (1)	One session late (2)	On time (3)
Depth of Understanding (4)	Unsatisfactory (1)	Superficial (2)	Satisfactory (3)	Adequate (4)
Completeness (3)	Not submitted (0)	Major topics are omitted or addressed minimally (1)	Most major and some minor points are covered and are accurate (2)	All major and minor points are covered and are accurate (3)



Lecture Plan

Class & Division		T.E. (ECS) – Semester V					
Academic Term		July 2021 – October 2021					
Subject		Software Testing & Quality Assurance (STQA) –ECCDO 501					
Periods (Hours) per week	Lectures		03				
	Practicals		02				
	Tutorials		--				
Evaluation System			Hours		Marks		
	Theory examination		03		80		
	Internal Assessment		--		20		
	Oral Examination		--		25		
	Term work		--		25		
	Total		--		150		
Time Table	Days			Time			
	Monday			10.10 – 11.10			
	Tuesday			09.00 – 10.00			
	Thursday			09.00 – 10.00			
COURSE CONTENTS & LESSON PLAN							
We ek No.	Lec ture No.	Date		Topic	Link for the lecture	Mode of Delivery	Ass. tool
		Planne d	Actual				
Module 1: Testing Methodology							
1.	1	12/7/21	12/7/21	Introduction to Software Testing, Goals of software testing	https://drive.google.com/file/d/1F5wyfvsB4J1-VF4XO0isM5QQ8pruMaRV/view?usp=sharing	Online lectures, ppt, notes	Assignment, unit Test, quiz
	2	14/7/21	14/7/21	Software testing definitions, Software testing model	https://drive.google.com/file/d/1_cclCSjwkhgsG3DhHGGs50q_07TPkwxm/view?usp=sharing		



	3	15/7/21	15/7/21	Exhaustive versus effective testing, software failure case studies	https://drive.google.com/file/d/1eHDvWzWbMt6pUgtpifeRSwiaLSxExRHe/view?usp=sharing			
2.	4	19/7/21	19/7/21	Definitions of testing related terms, bugs lifecycle, states of bugs, sources of bugs	https://drive.google.com/file/d/1SF3VFogwui5qBCe4FI0x8x3mf9cqL7hn/view?usp=sharing			
	5	22/7/21	22/7/21	Effect of bugs on economics of testing, classification of bugs	https://drive.google.com/file/d/1YKytydof1weWeiM7rnES4Pfk0ebfce_z/view?usp=sharing			
	6	26/7/21	26/7/21	Testing principles, Testing lifecycle	https://drive.google.com/file/d/1e2yIj5-kIZa6exEno92znG2fuNCYbtm1/view?usp=sharing			
3.	7	27/7/21	27/7/21 29/7/21	Testing methodology	https://drive.google.com/file/d/1SurElrhvKn3OwsKstQNDuTgtGPW6WGVH/view?usp=sharing			
	8	29/7/21	29/7/21	Verification, requirement verification, validation	https://drive.google.com/file/d/1HJLkyK-yTKR49_vz0hgqOOeOs4V5a8Ni/view?usp=sharing			
Module 2: Testing Techniques								
4.	9	2/8/21	2/8/21	Boundary Value Analysis	https://drive.google.com/file/d/1dSmSF6eI8VZUol-XQ4xhLCB6usehdAq/view?usp=sharing			
	10	3/8/21	3/8/21 5/8/21	Equivalence Class partitioning	https://drive.google.com/file/d/1tzO1hqaA1fa9M0eurzYOkTGF8MNaY5y2/view?usp=sharing			
	11	5/8/21	5/8/21	State table based testing	https://drive.google.com/file/d/1o_EJCfk28EG3L0HQbuI5Qi2ZBYmbAVpr/view?usp=sharing			
5.	12	9/8/21	9/8/21	Cause Effect graphing	https://drive.google.com/file/d/1yAj4XQM86dWdMgDVZRjjwBWwS47hNyAz/view?usp=sharing			
	13	10/8/21	10/8/21	Error guessing	https://drive.google.com/file/d/1Cj3Om9ZzPTa-u9hoHhFmO15MF2BeMcNi/view?usp=sharing			
	14	12/8/21	12/8/21	WB testing need, logic coverage criteria	https://drive.google.com/file/d/1Cj3Om9ZzPTa-u9hoHhFmO15MF2BeMcNi/view?usp=sharing			



7.	15	23/8/21	23/8/21	Basis path testing	https://drive.google.com/file/d/169Gn2ay54sKwdbeYsOCnwQQZ4IUox0Rj/view?usp=sharing			
	16	24/8/21	24/8/21	Graph matrices, loop testing	https://drive.google.com/file/d/1qEWrPx6u0gZjxEdl1fj-HJ6fq6SRRVL/view?usp=sharing			
	17	26/8/21	26/8/21	Data flow testing	https://drive.google.com/file/d/1pN6Zv-Ux8w8f3WhhiaULfEKr3q_uqQZ0/view?usp=sharing			
8.	18	30/8/21	30/8/21	Mutation testing, Static testing	https://drive.google.com/file/d/1sE9x1ukDgteArxNfNDwKpwwvQqhNZbCl/view?usp=sharing			
	19	31/8/21	31/8/21	Unit validation	https://drive.google.com/file/d/1XIS4XKz0KYNN2ssdoQDYbCzvwqBwpn8A/view?usp=sharing			
	20	2/9/21	2/9/21 6/9/21	Integration testing	https://drive.google.com/file/d/1LeAs5nnQPfEFY2-o5HOcQQIE5bQu0uH/view?usp=sharing			
9.	21	6/9/21	6/9/21	System testing	https://drive.google.com/file/d/1rUaD7Eg_p1ijPQaL5s3slQw_YrgpWy5-/view?usp=sharing			
	22	7/9/21	7/9/21	Acceptance testing	https://drive.google.com/file/d/1wmi_a3_owmltHCoEVNBipGsP6rsdKbiVp/view?usp=sharing			
	23	9/9/21	9/9/21	Regression testing	https://drive.google.com/file/d/1RYNkGaZb39HI5pbKwbzF6sAB3USisjac/view?usp=sharing			
10.	24	13/9/21	13/9/21	Regression Vs. Progressive testing	https://drive.google.com/file/d/1IU6PotpF8KnjW3pj3DO8WTW9jvVgLzbm/view?usp=sharing			
Module 3: Managing the test processes								
	25	14/9/21	14/9/21	Test organization, structure of testing group	https://drive.google.com/file/d/1SX0SEJuqjqkCygD78qbc2Nb9NPPultK/view?usp=sharing	Online lectures, ppt, notes	Unit Test , quiz	
	26	16/9/21	16/9/21	Test planning	https://drive.google.com/file/d/1dL1GUHxJ_hm0F-ll7qsT22pHKS4GPcB_/view?usp=sharing			



11.	27	20/9/21	20/9/21	Detailed test design	https://drive.google.com/file/d/1n9O2zKPa2n4aU7ju2p8bw_5ot703GPzL/view?usp=sharing		
	28	21/9/21	21/9/21	Software metrics need, classification	https://drive.google.com/file/d/1JqWh-2sXnCMlHxgi5LK8J9xNB2RLp3XX/view?usp=sharing		
	29	23/9/21	23/9/21	Classification of testing metrics	https://drive.google.com/file/d/1q6wxX3lVb89q7bd0JuwSxaf1yedzX3tq/view?usp=sharing		
12.	30	27/9/21	27/9/21	Minimizing test suite	https://drive.google.com/file/d/1_HrjgAYh2ZENn1GX79nX7kL_wb/view?usp=sharing		
	31	28/9/21	28/9/21	Minimizing test suite	https://drive.google.com/file/d/14xDZ3yhTM1hsV4sReDFwNDzBiuykE4pt/view?usp=sharing		
Module 4: – Test Automation							
	32	30/9/21	30/9/21	Need and categories of testing tools	https://drive.google.com/file/d/1Wjis5bLnke6_e5UaaYSqSkj2RXWUgSXdL/view?usp=sharing	Online lecture PPT	Unit test, quiz
13.	33	4/10/21	4/10/21	Selection and cost in testing tool	https://drive.google.com/file/d/10DkCg19sXXLI-26zT4C6iOYAAf0gHG1/view?usp=sharing		
	34	5/10/21	5/10/21	Guidelines and cost in testing tool	https://drive.google.com/file/d/10DkCg19sXXLI-26zT4C6iOYAAf0gHG1/view?usp=sharing		
Module 5: - Testing for specialized environment							
	35	7/10/21	7/10/21 14/10/21	Agile testing	https://drive.google.com/file/d/11_wTNfOhQLKxye6GP0hghk9Kj-IL7tsU/view?usp=sharing	Online lectures, ppt	Unit Test
14.	36	14/10/21	14/10/21	Testing OO software	https://drive.google.com/file/d/10DkCg19sXXLI-26zT4C6iOYAAf0gHG1/view?usp=sharing		
Module 6: Quality Management							
14.	37	18/10/21	18/10/21	McCall's Quality factors	https://drive.google.com/file/d/1Pv672gMvHviT8H6JMGZw6xsx8MZftHR-/view?usp=sharing	Online lectures, ppt	Assigme



38	21/10/21	21/10/21 23/10/21	ISO9000:2000	https://drive.google.com/file/d/1uVcNUI1yKup23PmCsDOw5Wgr92-KR0gy/view?usp=sharing		
39	23/10/21	23/10/21	Six Sigma	https://drive.google.com/file/d/1uVcNUI1yKup23PmCsDOw5Wgr92-KR0gy/view?usp=sharing		
END OF SEMESTER (TERM)						

Text books:

1. Software Testing Principles and Practices, Naresh Chauhan, Oxford Higher Education
2. Software Testing and quality assurance theory and practice, Kshirasagar Naik, Priyadarshi

Reference Books:

1. Effective Methods for Software Testing, Willam E. Perry, Wiley Publication, third edition
2. Software Testing Concepts and Tools, Nageswara Rao Pusuluri, Dreamtech press

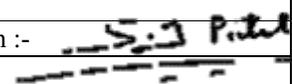
Research Papers:

1. P. Delgado-Pérez, A. B. Sánchez, S. Segura, and I. Medina-Bulo, “Performance mutation testing,” Software Testing, Verification and Reliability, Jan. 2020, doi: 10.1002/stvr.1728.
2. A. C. R. Paiva, A. Restivo, and S. Almeida, “Test case generation based on mutations over user execution traces,” Software Quality Journal, vol. 28, no. 3, pp. 1173–1186, May 2020, doi: 10.1007/s11219-020-09503-4.

Examination Scheme

	Module	Lecture Hours	Marks distribution in Test (For internal assessment/TW)		Approximate Marks distribution in Sem. End Examination
			Test 1	Test 2	
1	Testing Methodology	08	5	--	
2	Testing Techniques	16	15	--	
3	Managing the test processes	07		10	
4	Test Automation	03	--	05	
5	Testing for Specialized Environment	02	--	02	
6	Quality Management	03	--	03	



SUBMITTED BY :-	APPROVED BY :-
Prof. Saurabh Kulkarni	(i) Prof. K. Narayanan Sign :-
Sign: 	(i) Prof. Sapna Prabhu Sign :-
	(iii) Prof. Shilpa Patil Sign :- 
	(iv) Prof. Monica Khanore Sign :-
Date of Submission:- 31 st July 2021	Date of Approval:- 2 nd August 2021
Remarks by PAC (if any) :-	



CONTENT BEYOND SYLLABUS

FR. CONCEICAO RODRIGUES COLLEGE OF ENGG.Fr. Agnel Ashram,
Bandstand, Bandra (W) Mumbai 400 050.

Report on content Beyond Syllabus

Date: 30/11/2021

Subject- Software Testing and Quality Assurance (ECCDO501)

Year- 2021-2022

The Research papers from latest issues of Software Testing and Quality Journal, Wiley Publication and Software Testing Journal, Springer were given to students. Students gave presentation of the papers in given template in 12 minutes time with 3 minutes Q&A session. The topics involved wide range like UI testing, Assertions, Testing ML or AI systems, Testing mobile applications etc. which were not covered in the syllabus but can be used to bridge the gap for ECCDO501.4.

The links for the presentation are:

<https://drive.google.com/file/d/1wo28>

<https://drive.google.com/file/d/1D0I7g>

<https://drive.google.com/file/d/1JmXW>

These links are also available on the classroom with their attendance.

Also introduction to JUnit tool used for Unit Testing was done in the practical session. The links for the session are:

<https://drive.google.com/file/d/1Vhov>

<https://drive.google.com/file/d/1JXbpu>

<https://drive.google.com/file/d/1OG1a>

Subject In-Charge

Saurabh Kulkarni

DEPARTMENT OF ECS



SAMPLE GUEST LECTURE

11/15/22, 12:48 PM Fr. Conceicao Rodrigues College of Engineering Mail - Guest Lecture for Data Structures

Fr. CRCE 
e-mail kalpanas CRCE <kalpanas@fragnel.edu.in>

Guest Lecture for Data Structures
4 messages

kalpanas CRCE <kalpanas@fragnel.edu.in> 15 December 2021 at 12:59
To: Sankalp Rane <sankalprane1998@gmail.com>

Dear Sankalp,

I would like to invite you for give a guidance lecture to SE Computer Sem III students for the Data Structures subject.

Waiting for your reply.

Thanks and Regards,
Prof. Kalpana Deorukhkar
Fr. CRCE, Bandra

Sankalp Rane <sankalprane1998@gmail.com> 15 December 2021 at 13:03
To: kalpanas CRCE <kalpanas@fragnel.edu.in>

Hi ma'am,

I am really interested and would like to guide the students on Data Structures and Algorithms and introduce them to competitive coding.

Thanks and Regards,
Sankalp Subodh Rane.
[Quoted text hidden]

kalpanas CRCE <kalpanas@fragnel.edu.in> 15 December 2021 at 13:11
To: Sankalp Rane <sankalprane1998@gmail.com>

Thank you for your response.
[Quoted text hidden]

kalpanas CRCE <kalpanas@fragnel.edu.in> 15 December 2021 at 13:12
To: Sankalp Rane <sankalprane1998@gmail.com>

Your guest lecture is scheduled on 19th Dec 2021 at 3.00pm onwards.
I will be sharing google meet link.
Trnks
[Quoted text hidden]



SAMPLE PRACTICAL PLAN

T.E. (ECS) (Semester V)

Subject: ***Software Testing & Quality Assurance Lab (Practical)***

Teacher-in-charge: Prof. Saurabh Kulkarni

Subject code: ECL 503

Academic Term: July – October 2021

Course Outcomes:

Upon completion of this course students will be able to:

ECL503.1 Recognize failures in the system

ECL503.2 Design test cases

ECL503.3 Design test plan

ECL503.4 Execute test cases manually and using automated tools

ECL503.5 Manage the test process

Mapping Relationship of course outcomes with program outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO 11	PO 12	PSO1	PSO2
ECL503.1	3	2		1					2	2			1	
ECL503.2	3		3						2	2			2	
ECL503.3	3		3						2	2			2	
ECL503.4	3				3				2	2				2
ECL503.5	3				2				2	2				1



CO Assessment Tools:

<i>Course Outcomes</i>	Direct Method		Indirect Method
	End Sem	Lab Assignments/ Journal Assessment	Course exit survey
	ECL501.1	30%	70%
ECL501.2	30%	70%	100%
ECL501.3	30%	70%	100%
ECL501.4	30%	70%	100%
ECL501.5	30%	70%	100%

CO calculation= (0.8 *Direct method + 0.2*Indirect method)

Rubrics for assessing Course Outcome Lab Assignment:

Indicator				
Timeline (3)	More than two sessions late (0)	More than one session late (1)	One session late (2)	On time (3)
Depth of Understanding (4)	Unsatisfactory (1)	Superficial (2)	Satisfactory (3)	Adequate (4)
Completeness (3)	Not submitted (0)	Major topics are omitted or addressed minimally (1)	Most major and some minor points are covered and are accurate (2)	All major and minor points are covered and are accurate (3)



Practical Session Plan

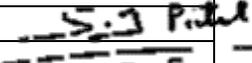
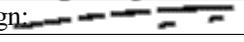
CLASS		TE Electronics and Computer Science, Semester V	
Academic Term		July – October 2021	
Subject		Software Testing & Quality Assurance Laboratory (ECL 503)	
Evaluation System	Practical Examination		Hours: --, Marks: --
	Oral Examination		Hours: --, Marks: 25
	Term work		Hours: --, Marks: 25
	Total		Hours: --, Marks: 50
Time Table	Day	Batch	Time
	Monday	C	11:30AM-01:30PM
	Tuesday	B	02:00PM-04:00PM
	Wednesday	D	02:00PM-04:00PM
Title of Experiments			
Sr.	Title	Attained COs	Attained POs
1	To find cyclomatic complexity of the given code	ECL503.2	PO3,PO9,PO10
2	To determine cause of failure of a function	ECL503.1	PO2,PO4,PO9,PO10
3	To prepare a test plan document	ECL503.3	PO3,PO9,PO10
4	Design test cases using Boundary Value Analysis	ECL503.2	PO3,PO9,PO10
5	Design test cases using Equivalence Class Testing	ECL503.2	PO3,PO9,PO10
6	Execute Test cases using JUnit Framework	ECL503.4	PO5,PO9, PO10
7	Execute Test cases using Selenium Web Driver	ECL503.4	PO5,PO9, PO10
8	Test case management with Qase	ECL503.5	PO5,PO9, PO10
9	Agile bug tracking with Jira	ECL503.5	PO5,PO9, PO10
10	Presentation on advanced research topics in Software Testing and Quality Assurance	ECL503.2,ECL503.4	PO5,PO9, PO10

Newly added experiments			
1	Execute Test cases using JUnit Framework		
2	Presentation on advanced research topics in Software Testing and Quality Assurance		
Practical Session Plan			
Batch	Dates		Remarks
	Planned	Actual	
Experiment No. 1			
B	27-07-2021	27-07-2021	https://drive.google.com/file/d/1U1lp
C	26-07-2021	26-07-2021	https://drive.google.com/file/d/1SurE
D	28-07-2021	28-07-2021	https://drive.google.com/file/d/1vO3
Experiment No. 2			
B	03-08-2021	03-08-2021	https://drive.google.com/file/d/1L8M
C	02-08-2021	02-08-2021	https://drive.google.com/file/d/1nWN



Fr. Conceicao Rodrigues College Of Engineering

D	04-08-2021	04-08-2021	https://drive.google.com/file/d/1tLCI
Experiment No. 3			
B	10-08-2021	10-08-2021	https://drive.google.com/file/d/1evtp
C	09-08-2021	09-08-2021	https://drive.google.com/file/d/1r7ttr
D	11-08-2021	11-08-2021	https://drive.google.com/file/d/1yqo9
Experiment No. 4			
B	24-08-2021	24-08-2021	https://drive.google.com/file/d/1Bga
C	23-08-2021	23-08-2021	https://drive.google.com/file/d/1SAE
D	25-08-2021	25-08-2021	https://drive.google.com/file/d/1G3g
Experiment No. 5			
B	31-08-2021	31-08-2021	https://drive.google.com/file/d/1evt
C	30-08-2021	30-08-2021	https://drive.google.com/file/d/1f3Vz
D	01-09-2021	01-09-2021	https://drive.google.com/file/d/1fa5F
Experiment No. 6			
B	07-09-2021	07-09-2021	https://drive.google.com/file/d/1Vho
C	06-09-2021	06-09-2021	https://drive.google.com/file/d/1JXb
D	08-09-2021	08-09-2021	https://drive.google.com/file/d/1OG1
Experiment No. 7			
B	21-09-2021	21-09-2021	https://drive.google.com/file/d/1Zx76
C	20-09-2021	20-09-2021	https://drive.google.com/file/d/1A2H
D	22-09-2021	22-09-2021	https://drive.google.com/file/d/19Abi
Experiment No. 8			
B	28-09-2021	28-09-2021	https://drive.google.com/file/d/1B42
C	27-09-2021	27-09-2021	https://drive.google.com/file/d/1DIz3
D	29-09-2021	29-09-2021	https://drive.google.com/file/d/1YDL
Experiment No. 9			
B	05-10-2021	05-10-2021	https://drive.google.com/file/d/1lzL0
C	04-10-2021	04-10-2021	https://drive.google.com/file/d/1NSa
D	06-10-2021	06-10-2021	https://drive.google.com/file/d/1VTz
Experiment No. 10			
B	20-10-2021	20-10-2021	https://drive.google.com/file/d/1wo2
C	18-10-2021	18-10-2021	https://drive.google.com/file/d/1D0I7
D	21-10-2021	21-10-2021	https://drive.google.com/file/d/1JmX

Submitted By	Approved By
Prof. Saurabh Kulkarni	ii) Dr. D. V Bhoir Sign:
Sign: 	ii) Prof. K. Narayanan Sign:
	iii) Prof. Shilpa Patil Sign: 
	iv) Prof. Monica Khanore Sign: 
Date of Submission:	Date of Approval:
Remarks by PAC (if any)	



SAMPLE ADVANCED AND SLOW LEARNERS ACTION TAKEN

Department of Computer Engineering

**BE(Comps) Sem VII
Big Data Analytics (CSDLO7032)
Academic Year (2021-2022)**

Identification of Advanced and Slow Learners during Lab Performance, UNIT TEST1

Classification: Tool (Lab Performance)	Identification method	Name of students	Suggestions of Mini Projects Topics/ Observations of Unit Test Marks
Strong students	Good Marks in UT	Isha Agrawal	Neo4j based application
		Yameen Ajani	Network Attack Detection with decision tree with pyspark / Mlib
	Interaction during lectures.	Mario Dias	Cloudera
		Nicola Mascarenhas	Nodejs-MongoDB using Express
		Mascarenhas Nisha	Neo4j based application
	Performance in lab experiments	Sahaana C. Iyer	Neo4j knowledge Graph - Supply Chain Management
		Zachariah Mathew	Movie Recommendation -Collaborative Filtering
On time submissions.			
Weak Students	Unit Test 1 Marks and Lab Performance	Atish Dussa	Unit Test Marks Unit Test 2-14 Unit Test 1- 13
		Justin Nadar	Unit Test 2-18 Unit Test 1-12
		Suryansh Purohit	Unit Test 2-18 Unit Test 1-13
		Ayush Yadav	Unit Test 2-18 Unit Test 1-12
		Aditi Pai	Unit Test 2-18 Unit Test 1-13

Strong Students Identified and Action taken:

STUDENTS ARE SUGGESTED WITH MINI PROJECT TITLES.

Strong/ Weak Students Identified and Action taken:

1. INTERACTION WITH STUDENTS TO BOOST THEIR CONFIDENCE LEVEL
2. SURYANSH AND ADITI DID NOT STUDY PROPERLY DURING UT1
3. STUDENTS REMINDED WITH THE LECTURE NOTES UPDATION IN CLASS ROOM
4. ASKED THE STUDENTS TO ATTEMPT QUIZZES PROPERLY



SAMPLE CO ATTAINMENT

DIRECT TOOLS: Unit Test, Assignment, Quiz, Oral, End Semester Exam				Target Range		
INDIRECT TOOLS : COURSE EXIT SURVEY(CES)				>=60%	High (H)	3
n=Number of students above threshold range				<60% >50%	Medium (M)	2
N=Total number of students				<50%	Low (L)	1
				Not attained (NA*) (*Action Plan required)		0
ECCDO 501.1 CO Attainment						
Tools	Unit Test	Assignments	Quiz	End Semester Exam	Oral Exam	CES
Weightage	30%	20%	20%	20%	10%	100%
Threshold	80%	70%	80%	70%	70%	75%
n	49	34	43	49	54	58
N	59	59	59	59	59	59
n/N	0.83	0.58	0.72	0.83	0.91	0.98
n/N (%)	83%	58%	72%	83%	91%	98
H/M/L	H	M	H	H	H	H
3/2/1	3	2	3	3	3	3

Direct attainment= $0.3 \times \text{Unit Test} + 0.2 \times \text{Assignment} + 0.2 \times \text{Quiz} + 0.2 \times \text{End Sem Marks} + 0.1 \times \text{Oral} = 2.8$

Indirect Attainment=3

ECCDO501.1 Attainment = $0.8 \times \text{Direct} + 0.2 \times \text{Indirect} = 0.8 \times 2.8 + 0.2 \times 3 = 2.84$



SAMPLE BE PROJECT COURSE OUTCOMES AND RUBRICS

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
Department of Computer Engineering

B.E. MAJOR PROJECT
Course Outcome and Rubrics
(Academic Year: 2021-22)

Course Outcome: Semester – VII

CO No.	COURSE OUTCOME	POs covered	PSOs Covered
CO1	Identify a problem and propose a software solution.	PO1, PO2, PO9, PO11, PO12	
CO2	Identify, summarize and analyze appropriate literature and relate them to the problem in hand.	PO1, PO2, PO9, PO11, PO12	
CO3	Design a solution to chosen problems using an appropriate approach or methodology considering professional ethics and responsibility towards societal, health, safety, and legal issues.	PO1, PO3, PO5, PO6, PO8, PO9, PO11, PO12	PSO1, PSO2
CO4	Showcase their oral and written communication skills.	PO9, PO10	

SAMPLE PROJECT EVALUATION RUBRICS

Mid Term Presentation Rubrics – Sem VII

Clear understanding of goals and objectives (CO1)	Identification of constraints (CO1)	SRS document (CO1)	Identification of relevant Literature (CO2)	Summarization of results and findings of the overall literature review process (CO2)	Identification of project phases (CO3)	Identification of tools and Technologies to be used (CO3)	Identification of possible Problems at each stage and suggestion on prevention methods (CO3)	Relevance/ Innovativeness/ Feasibility and applicability of the proposed solution (CO1,CO3)	Total
4M	4M	8M	4M	6M	8M	6M	6M	4M	50M

Term Work Rubrics: Sem VII (Total – 50M)

Use of Software Engineering Techniques (CO1)	Breadth and depth of Literature Survey (CO2)	Theoretical Analysis of proposed problem (CO3)	Design/ Methodology (CO3)	Presentation of contents (CO4)	Report writing (CO4)	Relevance/ Innovativeness/ Feasibility and applicability of the proposed solution (CO1,CO3)	TOTAL (A)	PRES ENT ATION (B)	Total (A+B)	FIRST MIDTERM PRESENTATION (C)	TERMWORK TOTAL 0.4*(A+B)+0.6*(C)
05M	06M	07M	07M	4M	6M	5M	40M	10M	50M	50M	50M

Oral Rubrics: Semester VII (25M)

Use of Software Engineering Techniques (CO1)	Breadth and depth of Literature Survey (CO2)	Theoretical Analysis of proposed problem (CO3)	Design/ Methodology (CO3)	Presentation of contents	Report writing (CO4)	PRESENTATION (CO4)	Total
03M	03M	04M	04M	03M	03M	05M	25M



MID TERM PRESENTATION NOTICES

Fr. Conceicao Rodrigues College of Engineering
Department of Computer Engineering
Academic year: 2021-22
B.E .Computer Engineering
Date: 17-01-2022

NOTICE

FIRST MID - TERM PROJECT PRESENTATION

B.E. Computer Engineering students are hereby informed that the Major Project II, First Midterm Presentations (Panel presentation) have been scheduled from 31st January to 5th February 2022..

A Judges panel comprising of two guides have been formed who will be evaluating the Project Progress. The students will have to communicate with respective guide and fix up suitable date and time on or before 4th October 2021. Judges panel and teams list is attached below.

Presentation schedule: 31st January to 5th February 2022
Platform for conducting presentations: Google Meet
Time per team: 20 Minutes

Prof. Dipali Koshti
(Project coordinator)

Dr. B.S. Daga
H.O.D
(Computer Engineering Department)



Fr. Conceicao Rodrigues College of Engineering
Department of Computer Engineering

B.E .Computer Engineering

Academic year: 2021-22

Date: 21-03-2022

NOTICE

SECOND MIDTERM PROJECT PRESENTATION

B.E. Computer Engineering students are hereby informed that the Major Project II, Second Midterm Presentations (Panel presentation) have been scheduled from 31st March to 5th April 2022

A Judges panel comprising of two guides have been formed who will be evaluating the Project Progress. The students will have to communicate with a respective guide and fix up a suitable date and time on or before 5th April 2022. The judge's panel and teams list are attached below. The presentation may be conducted offline or online as per convenience.

Presentation schedule: 31st March to 5th April 2022

Platform for conducting online presentations: Google Meet

Time per team: 20 Minutes

Prof. Dipali Koshti
(Project coordinator)

Dr. B.S. Daga
H.O.D

(Computer Engineering Department)



Fr. Conceicao Rodrigues College of
Engineering
Department of Computer Engineering

Academic year: 2021-22

B.E Computer Engineering
Date: 20-10-2021

NOTICE

All students of B.E. Computer Engineering are here by informed that B.E. Computers, Major Project I, oral Examination is scheduled from 29th October to 30th October 2021. All project groups will have to keep following documents ready before their final project oral examination. Students are required to get validated all the documents from respective mentor before final submission to the department.

Each group will have to submit following documents on or before 2nd November 2021:

1. Sem 7 project report
2. Project Software Requirement Specification document (SRS)
3. LogBook
4. PPT

Drive link to upload all documents:

<https://drive.google.com/drive/folders/1fExGEqfWL4DXCrclqaoepe-4wwzyS0ke?usp=sharing>

Note: Kindly create a folder with your Group Id and Title of the project (Short title)

Example: BECOMP_02_Fraud Detection

Prof. Dipali Koshti
(Project coordinator)

Dr. B.S. Daga
H.O.D
(Computer Engineering Department)



INSTRUCTIONS FOR B.E MAJOR PROJECT ORAL EXAMINATION

This is to inform all Final year students of Computer Engineering that BE Major project oral examination is scheduled on 29th and 30th April 2022.

Following are the instructions for the students.

Prepare a PPT consisting of the following slides in the order given:

1. Introduction
2. Literature review OR survey of an existing system or product
3. Summary of literature, Research Gap (Optional)
4. Problem statement
5. Objectives
6. Scope/significance/relevance of System
7. Proposed System
 - 7.1 Architecture of the proposed system
 - 7.2 Design or Methodology (Algorithms / Flow chart/ Block Diagram/ Usecase, UML diagrams etc..)
 - 7.3 Hardware/ Software specifications
8. Implementation (A few screenshots)
9. Results
10. Future work
11. References (IEEE format)

2. Come in formal with ID-card

3. Bring a hard copy of the Project report and SRS at the time of the Oral examination

4. Limit your presentation and demo to 15 minutes followed by 5 minutes of question and answer



EXAMINER'S FEEDBACK FORM - Project (2021-22)

Branch : COMPUTER Class (B.E./T.E./ S.E.): BE Semester: VIIIName of Internal examiner: Sujata DeshmukhName of External examiner: Dr. Anil ChhanganiCollege of External examiner: T.S.C.E., Bandra.Date of Examination: 30-04-2022

Student Performance Analysis (Put Tick as per your Observation) Excellent (3), Very Good (2), Good (1)

Sr. No.	Observations	(3)	(2)	(1)
Project Title: <u>Identity management using Blockchain</u>				
1	Quality of problem and Clarity	3		
2	Innovativeness in solutions	3		
3	Cost-effectiveness and Societal impact		2	
4	Full functioning of working model as per stated requirements		2	
5	Effective use of skill sets	3		
6	Effective use of standard engineering norms	3		
7	Contribution of an individual's as a member or leader	3		
8	The clarity in written and oral communication	3		
9	Overall performance	3		
Project Title: <u>Centralized Platform for Hackathons</u>				
1	Quality of problem and Clarity		2	
2	Innovativeness in solutions		2	
3	Cost-effectiveness and Societal impact		2	
4	Full functioning of working model as per stated requirements		2	
5	Effective use of skill sets	3	2	
6	Effective use of standard engineering norms		2	
7	Contribution of an individual's as member or leader	3	2	
8	Clarity in written and oral communication	3		
9	Overall performance		2	

- Is the work done by the project group substantial to proceed in the next semester? (Yes/ No) Yes
- If No, suggest new Innovative Technique/Idea/ objectives related to this project.

Research Paper PublicationSignature of External Examiner Drh



SAMPLE UNIT TEST PAPER (Year 22-23)

Fr. Conceicao Rodrigues College of Engineering

Department of Artificial Intelligence and Data Science

Subject: Web Computing

Semester: V

Total Marks: 20

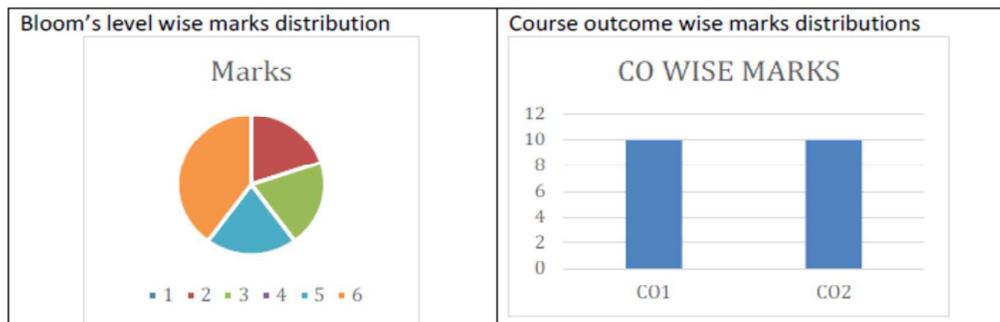
Date: September 5, 2022

Course Outcomes:

CSC502.1 : Select protocols or technologies required for various web applications.

CSC502.2: Apply JavaScript to add functionality to web pages.

Q.No	Question	Marks	CO	BL	PI
1	The website page http://www.myshop.com/home.html is requested by the client using web browser. With the help of a neat and clean diagram show all the steps happening in background for request to response between client & server.	05	CO1	3	1.7.1 2.5.2 2.7.1
2	An Employee Management System needs to maintain the records of all the employees. Empid, name (fname, lname), dept is stored in the form of XML. How do you prove that it is well formed and valid XML? Design XML & (DTD or Schema) OR Design and discuss your company web application assuming ReactJs, NodeJs with MongoDB as backend with help of 3-tier web application architecture diagram.	05	CO1	5-6 6	1.6.1 1.7.1 2.5.2 2.6.1 2.6.2 2.7.1 3.8.2 3.8.3
3	Design the webpage that is dynamically changed after the onclick button event. Before Click  After Click  OR Write the code to process online Alumni information for your college. Create form to get name, address, date of birth and email id. Use check boxes for taking hobbies and radio buttons for selecting branch. Write JavaScript code to validate the following. -User has filled all the fields prior the form submission. -Valid e-mail id (@ and .) -Age validation using DOB (>=22 years)	05	CO2	6 6	1.6.1 1.7.1 2.5.2 2.6.1 2.6.2 2.7.1 3.8.2 3.8.3
4	Explain different ways of using functions in ES6. What is Arrow function and Generator function? What are its advantages. Explain with example. OR Differentiate ES5 and ES6. Write new features of ES6.	05	CO2	2 2	1.6.1 1.7.1 2.7.1





SAMPLE UNIT TEST PAPER (Year 21-22)

UNIT TEST 2 - TCS - Section 1

*** Required**

1. Email *

2. ROLL NUMBER *

3. NAME OF STUDENT *

4. As per Chomsky Hierarchy Type2 Grammar is * 1 point

Mark only one oval.

Regular Grammar

Context Free Grammar

Context Sensitive Grammar

Unrestricted Grammar

5. A Grammar is said to ambiguous if? * 1 point

Mark only one oval.

If it can derive all sentences using LMDs and not by RMD

If it can derive at least one sentence using more than one LMD/RMD

If it can derive all sentences using exactly one LMD or RMD

If it can derive one sentence using exactly one LMD or RMD

6. Which of the following statement is correct? * 1 point

Mark only one oval.

Regular Language is the superset of Recursively Enumerable Language

Context Sensitive Language is the subset of Context Free Language

Context Free Language is the superset of Recursively Enumerable Language

Regular Language is the subset of Context Free Language

7. If the PDA does not stop on an accepting state and the stack is not empty, the string is: * 1 point

Mark only one oval.

Rejected

Goes into loop forever

Accepted

Goes in a single loop

8. A PDA machine configuration (q, a, X) can be correctly represented as: * 1 point

Mark only one oval.

(unprocessed input, stack content, current state)

(current state, unprocessed input, stack content)

(current state, stack content, unprocessed input)

none of the mentioned



9. 3 point

Mark only one oval.

$L = \{a^n b^n : n > 0\}$

Option 1

$L = \{a^{2n} b^n : n > 0\}$

Option 2

$L = \{a^n b^{2n} : n > 0\}$

Option 3

$L = \{a^{2n} b^{2n} : n > 0\}$

Option 4

10. Halting states of Turing machine are called as * 1 point

Mark only one oval.

- Start and stop
- Accept and reject
- Start and reject
- Reject and allow

11. Given a Turing Machine $M = (\{q_0, q_1, q_2, q_3\}, \{a, b\}, \{a, b, B\}, \delta, B, \{q_3\})$ Where δ is a transition function defined as $\delta(q_0, a) = (q_1, a, R)$, $\delta(q_1, b) = (q_2, b, R)$, $\delta(q_2, a) = (q_2, a, R)$, $\delta(q_2, b) = (q_3, b, R)$. The language $L(M)$ accepted by the Turing Machine is given as: * 1 point

Mark only one oval.

- aa^*b
- $abab$
- aba^*b
- aba^*

12. Which of the following problems is solvable? * 1 point

Mark only one oval.

- Determining of an arbitrary turing machine is an universal turing machine
- Determining of a universal turing machine can be written for fewer than k instructions for some k
- Determining of a universal turing machine and some input will halt
- Writing a universal Turing machine

13. Which of the following strings is not accepted by the given M * 1 point

Present state	Tape symbol			
	0	1	y	B
q_0	$\rightarrow Rq_1$			$\rightarrow Rq_1$
q_1	$0Rq_2$	$1Lq_1$		yRq_1
q_2	$0Lq_2$		yRq_2	yLq_2
q_3	$0Lq_3$		yRq_3	
q_3			yRq_3	$B Rq_3$

Mark only one oval.

- 011
- 0011
- 001
- 0110



UT2 - TCS - Section 2

* Required

1. Roll Number * 1 point

2. Q 2 - Solve any 2 * 5 points

a) Design Context Free Grammar for $L(G) = \{a^n b^m | n > m\}$

b) Find Equivalent Greibach Normal Form (GNF) for given CFG.

$S \rightarrow aSB \mid aA$

$A \rightarrow Aa \mid Sa \mid a$

c) Design PDA for the following Language.

$L = \{a^n b^n c^m | m, n \geq 1\}$

Files submitted:

3. Q 3 Solve any One * 5 points

a) Design Turing Machine for well formed parenthesis $\Sigma = \{ (, [,] ,) \}$

b) Design a Turing Machine that computes GCD of two numbers.

Files submitted:



SAMPLE ACADEMIC AUDIT REPORT

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
Fr. Agnel Ashram, Bandra, Mumbai 400 050

Department of Computer Engineering
Academic and Department Audit Report

Minutes of the Academic and Department Audit held on July 20, 2022 from 10 am in Room No 611.

Following staff members have attended the audit:

1. Dr. Sujata Deshmukh (Head of the Department (HoD))
2. Dr. Sunil Surve
3. Dr. Brijmohan Daga
4. Prof. Merly Thomas
5. Prof. Swati Ringe
6. Prof. Roshni Padate
7. Prof. Kalpana Deorukhkar
8. Prof. Ashwini Pansare
9. Prof. Dipali Koshti
10. Prof. Surpiya Kamoji
11. Prof. Monali Shetty

Dr. Sujata Deshmukh welcomed Dr. Narendra Shekokar from D. J. Sanghvi college of Engineering, Vile Parle (W), External expert for the Academic Audit.

Dr. Shekokar meticulously examined the course files of the faculty. He observed most of the course files to be appropriate and having good course contents. He gave the following suggestions to make the course delivery more efficient:

- Provide additional resources to the students
- Need improvement in the content beyond syllabus
- CO-PO mapping justification needs refinement
- Incorporate more innovative teaching-learning methods
- Invite industry expert for mini-project evaluation
- Include End Semester Exam paper solution in course file
- Include innovative experiments

The academic Audit was followed by the Department Audit. Dr. Shekokar did scrupulous examination of the department related files, and was satisfied with the records maintained in the files.

The Audit ended with thanks to Dr. Shekokar for his valuable inputs and suggestions.

Dr. Sujata Deshmukh



SAMPLE OF ACADEMIC AUDIT EVALUATION RUBRICS

Society of St. Francis Xavier, Pilar's
Fr. Conceicao Rodrigues College of Engineering
 Fr. Agnel Technical Education Complex Bandstand,
 Bandra Mumbai -400 050

Rubrics for Evaluation

Sr. No	Parameters to be verified	Rubrics				
		5	4	3	2	1
1	Course Plan and Execution Course plan is appropriate and execution deviation is:	less than 5%	less than 10%	less than 15%	less than 20%	less than 25%
2	Reference of teaching material Faculty refers relevant number of text books, reference books and other reference material (on line content , research papers etc.) for content delivery (Text books – T, Reference books – R)	2-T, 2-R, Web reference material & Papers	2-T, 2-R, and Web reference material	2-T and 1-R/ Web reference material	2-T or 1-T, 1-R/ Web reference material	1-T
3	Mapping COs with POs and PSOs Writing COs with proper understanding and mapping in right prospective to appropriate POs and PSOs with correct levels by giving proper justification: a. Clarity of CO statements b. Proper mapping of CO to PO c. Proper mapping of CO to PSO d. Proper mapping of CO to PO with appropriate level e. Proper mapping of CO to PSO with appropriate level	All 5	Any 4	Any 3	Any 2	Any 1
4	Effective Delivery Mechanism Awareness of various teaching methodologies and effective use of each method wherever applicable.	Any four methods with proper justification	Any three methods with proper justification	Any two methods with proper justification	Any one method with proper justification	Any methods without proper justification
5	Content Beyond Syllabus a. Proper identification of gap b. Mapping of gap with proper CO c. Effort taken by faculty to fill the gap	All three with proper justification	All three	Any two	Any one	Not done
6	Quality of UT Question Papers: a. Quality of question paper using Bloom's Taxonomy b. New questions framed for testing the concepts c. Framing of questions according to COs d. At least four levels of Bloom's Taxonomy are followed.	All 4	Any 3	Any 2	Any 1	Not done

FrCRCE/Ver.1

SAMPLE OF ACADEMIC AUDIT EVALUATION


 Society of St. Francis Xavier, Pilar's
Fr. Conceicao Rodrigues College of Engineering
 Fr. Agnel Technical Education Complex Bandstand,
 Bandra Mumbai -400 050
Department of Mechanical and Production Engineering

Course Code and Name: MEC403 Kinematics of Machinery Academic Year - 2021-22

Name of the Faculty: Dr. Ketaki Joshi Branch/SEM - Mechanical / IV

Part A (Quantitative analysis)			
Note: Faculty can enter appropriate number as remark.			
1 → Needs Improvement 2 → Satisfactory 3 → Good 4 → Very Good 5 → Excellent			
Sr. No	Parameters to be verified	Remarks by faculty	Supporting Document
1	Course Plan and Execution	5	Lecture Plan available in course file
2	Reference of teaching material	4	Textbooks and reference books mentioned in syllabus, Youtube videos, animations used during presentations
3	Mapping COs with POs and PSOs	4	Available in course file
4	Effective Delivery Mechanism	5	Power point presentations, Youtube videos, animations, class notes shared in Google classroom
5	Content Beyond Syllabus	2	NA
6	Quality of UT Question Papers	4	Available in Course files
Part B (Qualitative analysis)			
Note: Faculty can enter Yes or No as remark with proper justification			
7	Course file maintained and verified by domain coordinator and HOD	Yes	Course file is maintained and updated on timely basis. It contains lecture plan, assignments, UT papers and Model answers, TW and IA marks, CO Attainments etc.
8	Innovative teaching and learning process and evaluation method.	Yes	Powerpoint presentations, youtube videos, simulations, animations are used apart from chalk and board method to help students visualize the working of various mechanisms.
9	Students Performance Evaluation Methods, analysis of assessment results and corrective measures.	Yes	Performance is evaluated through assessment of lab exercises, assignments, unit test and end semester exam papers. Corrective action are taken to provide more practice for difficult topics during lab sessions.
10	Rubrics created and followed for assessment	Yes	Assignments are evaluated on the basis of content, understanding and timeliness.
11	Identifying weak students and method adopted for improvement in the performance.	Yes	NA
12	Resource material available to the students	Yes	Presentations, links for youtube videos are shared in Google classroom.

* For justification supporting documents need to be produced

FrCRCE/Ver.1

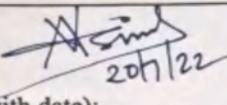


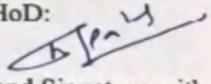
SAMPLE OF ACADEMIC AUDIT EVALUATION

 Society of St. Francis Xavier, Pilar's
Fr. Conceicao Rodrigues College of Engineering
Fr. Agnel Technical Education Complex Bandstand,
Bandra Mumbai -400 050

Action Taken Report of Previous Year/Semester Remarks (NA if subject is introduced first time):
Remark - Excellent

Course Teacher (Name and Signature with date): ^{audit} 14/12/22 Dr. Ketaki Joshi

Remarks by Co-ordinator:  20/1/22 Dr. Vasim Shaikh
Co-ordinator (Name and Signature with date):

Remarks by HoD: 
HoD (Name and Signature with date):

Remarks by Audit Members:
Excellent

Audit done by (Name and Signature with date):
1. Dr. K. S. Bhok 
2. Dr. A. T. P. 
3. Dr. Shaikh 

FCRCE/Am.1



SAMPLE COURSE EXIT SURVEY

BIG DATA ANALYTICS - COURSE EXIT SURVEY

At the end of the semester

CO1: I am able to understand the key issues in big data management and its associated applications for business decisions and strategy. [B1: Understand....Understanding big data characteristics, issues, case studies and Tools]

CO2: I am able to develop problem solving and critical thinking skills in fundamental enabling Techniques like Hadoop and MapReduce in big data analytics. [B3: Application... HDFS, MapReduce, YARN]

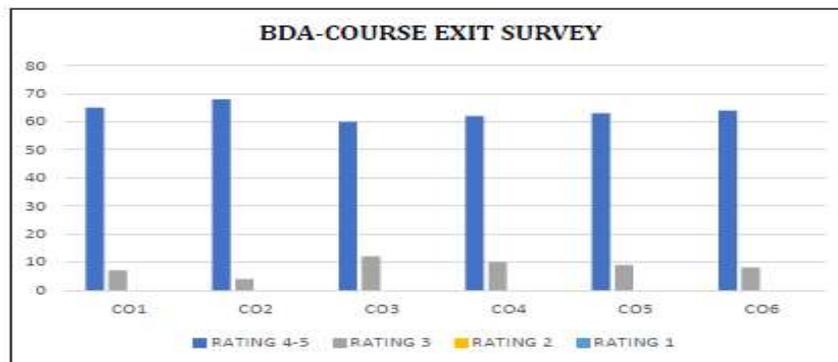
CO3: I am able to collect, manage, store, query and analyze various forms of Big Data[B4: Analysis.... NoSQL]

CO4: I am able to interpret business models and scientific computing paradigms, and apply software tools for big data analytics. [B3: Application.... DSMS Model, Clustering algorithms with Ecosystem components]

CO5: I am able to adapt adequate perspectives of big data analytics in various applications like Recommender systems, Social Media applications etc. [B3: Application PageRank, Recommendation systems, and GNewman /CPM Algorithm]

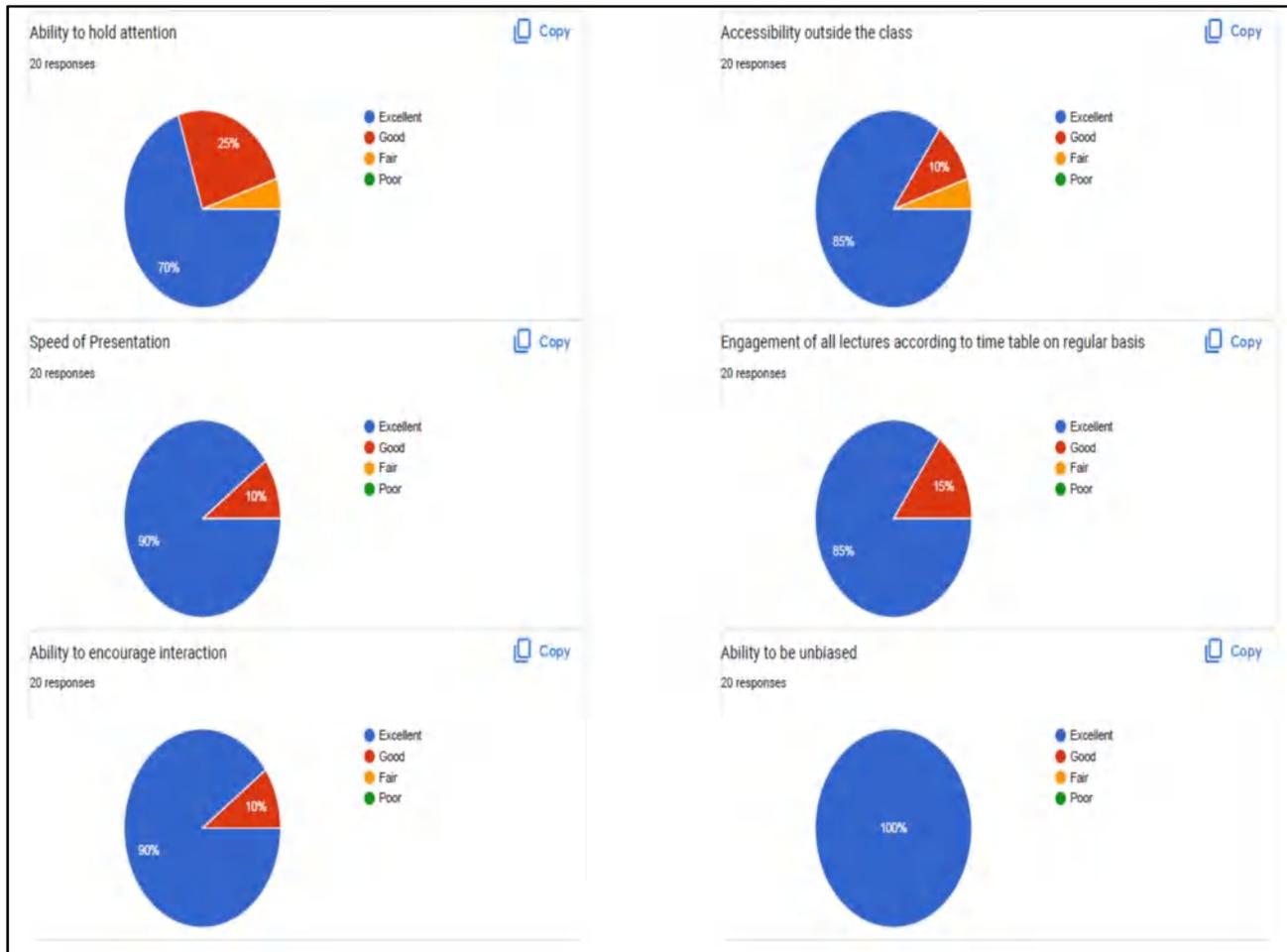
CO6: I am able to solve Complex real world problems in various applications like Recommender systems, Social media applications, health and medical systems, etc. [B3: Application - Mini Project real world example]

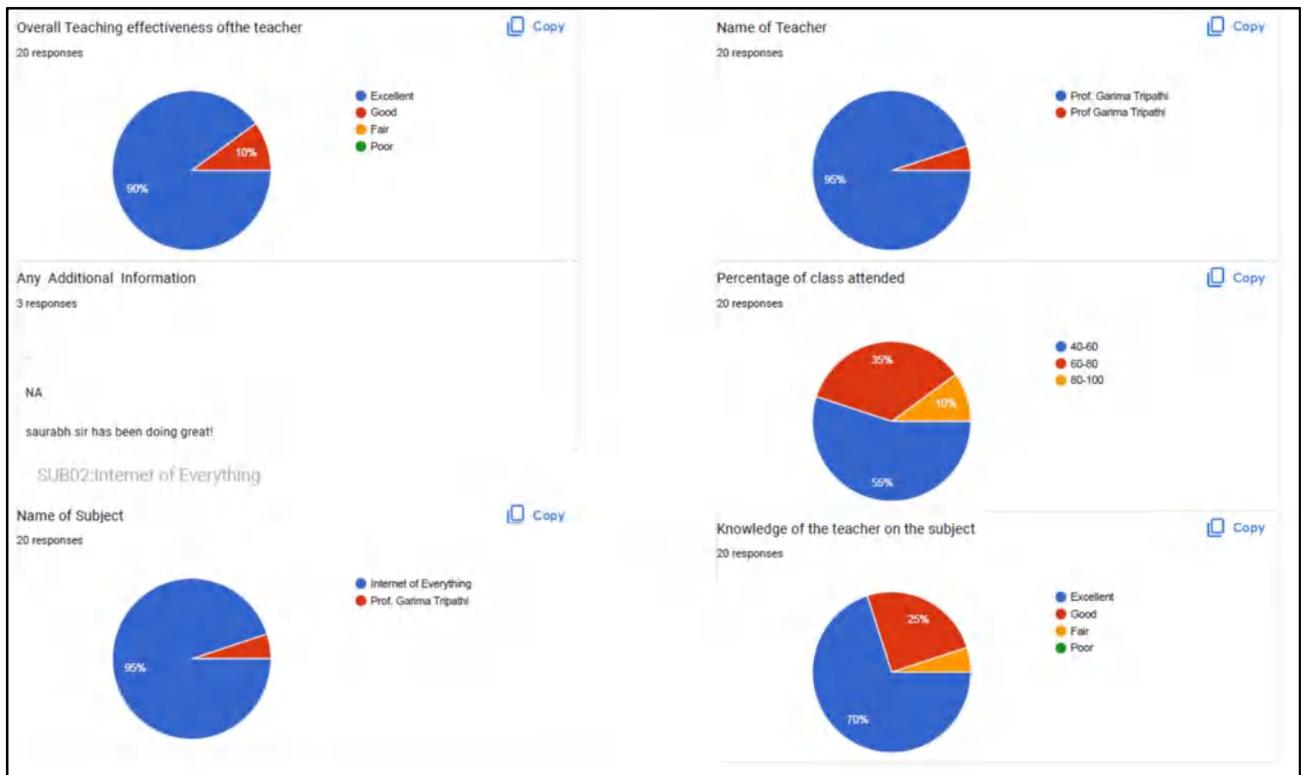
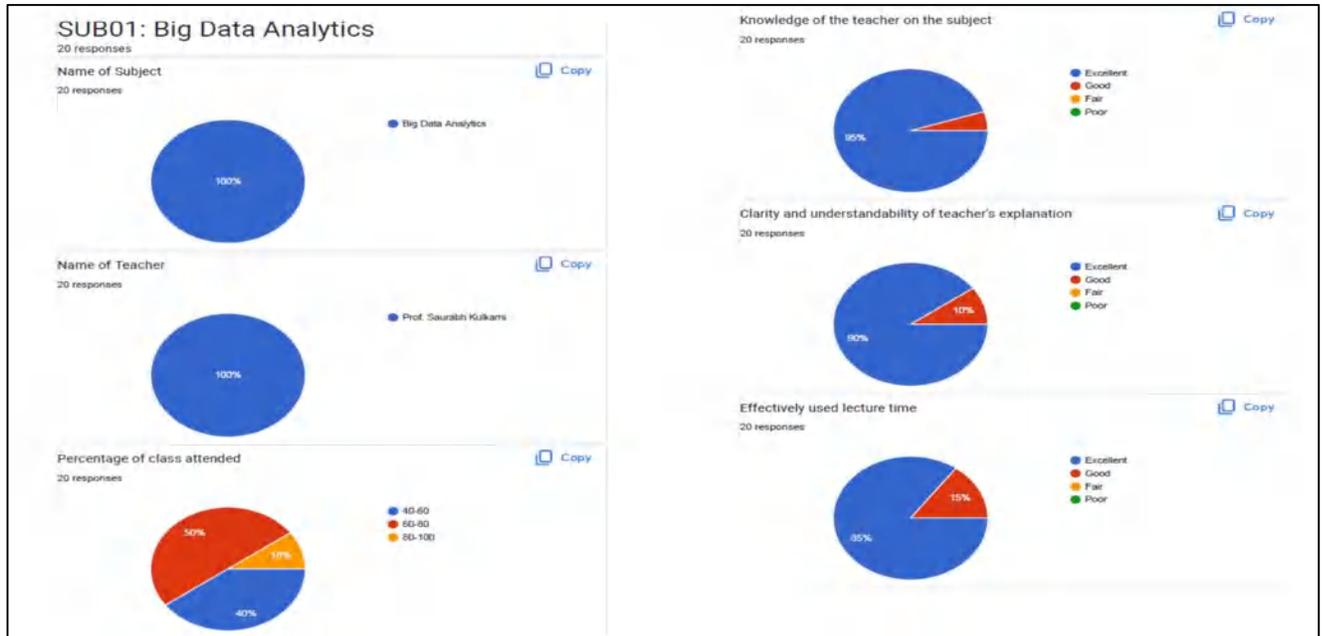
FR.C.R.C.E						
Department of Computer Engineering						
Subject: Big Data Analytics (CSDLO7032)				Year: 2021-2022		
Course Exit Survey						
Rating	5	4	3	2	1	
CO1		65	7			
CO2		68	4			
CO3		60	12			
CO4		62	10			
CO5		63	9			
CO6		64	8			





SAMPLE STUDENT FEEDBACK REPORT (MID TERM)







SAMPLE STUDENT FEEDBACK REPORT (END SEM)

Fr. Conceicao Rodrigues College of Engineering

Bandstand, Bandra (West), Mumbai – 400050

Term End Feedback Report

Branch	Mechanical Engineering
Semester	Sem-V
Subject	MECHANICAL MEASUREMENTS AND CONTROLS
Name of the Teacher	Saurabh Korgaonkar
Factors and Responses:	
The lectures were delivered with authority and excellent communication skill.	4.33
The subject was covered with apt depth and breadth.	3.33
The real life problems and applications have been presented to provide the right balance between theory and practice.	4.00
The teacher effectively used the lecture time.	4.00
The teacher has good ability to hold attention.	4.00
The lectures have been aimed at encouraging independent thinking and the ability to apply logical reasoning.	4.33
The teacher is punctual and has taken sufficient classes to cover the complete syllabus.	4.00
The teacher has been unbiased in assessment of student performance and term-work.	4.33
Evaluated term-work, assignments, seminars provided me a prompt and constructive feedback.	4.33
The teacher has provided student counselling guidance beyond academic requirement.	4.00
In my opinion, the overall rating of the teacher is good.	4.00



SAMPLE FACULTY CONTRIBUTION IN SYLLABUS SETTING

Fr. CRCE
e-mail 

swati CRCE <swati@fragnel.edu.in>

Fwd: Syllabus setting of Final Year ECS
1 message

sapna CRCE <sapna@fragnel.edu.in> Wed, Nov 23, 2022 at 12:37 PM
To: swati CRCE <swati@fragnel.edu.in>

----- Forwarded message -----
From: **sapna CRCE** <sapna@fragnel.edu.in>
Date: Tue, May 17, 2022 at 4:47 PM
Subject: Syllabus setting of Final Year ECS
To: bhoir <bhoir@frcrce.ac.in>, <girish.gidaye@vit.edu.in>, <sushma.kodagali@rait.ac.in>, <swapnali@frcrce.ac.in>

Dear Madam/Sir,

On behalf of the University of Mumbai and with the approval of Chairman, BOS Electronics Engineering, we are happy to inform you that you have been appointed on the panel for the Syllabus preparation. We request you to spare your valuable time and contribute towards the preparation of the detailed syllabus under the new CBCGS scheme for the subject **VLSI Design ECC 701 (Theory and Lab)** for BE Electronics and Computer Science (Semester VII)

The details of the panel members are as follows:

1. Dr. D.V. Bhoir (Coordinator)
Professor, Fr. CRCE
9869433765
bhoir@frcrce.ac.in
2. Dr. Girish Babaji Gidaye
Professor, VIT
9819289997,
girish.gidaye@vit.edu.in
3. Prof. Sushma Kodagali,
Assistant professor, RAIT
98335 50701
sushma.kodagali@rait.ac.in
4. Prof. Swapnali Makdey
Assistant Professor,
9769091874
swapnali@frcrce.ac.in

Please refer to the model curriculum of AICTE. The syllabus should be Outcome-based and made for a total of 39 hours (Theory). Please add Course objectives and Outcomes. Please add the books written/published by standard authors and publishers as text and reference books (preferably recent ones/latest editions).

I request you to submit (mail) the syllabus (complete in all respects) latest by **May 25, 2022**.

Please feel free to get back to me in case of any queries/doubts.

Thanks and Regards,

<https://mail.google.com/mail/u/0/?ik=c0fb2cd843&view=pt&search=all&permthid=thread-f%3A1750269688634808544&simpl=msg-f%3A1750269...> 1/2

Dr. Srijia Unnikrishnan
Principal, Fr. C. Rodrigues College of Engineering, Bandra (W), Mumbai
Member, Ad-hoc BOS Electronics Engineering, University of Mumbai

3 attachments

-  **ECS_Rev C Scheme_20 19 (22).pdf**
1017K
-  **ECS_Blank_2020-21.docx**
38K
-  **ECS_Blank_lab_2020-21.docx**
33K