## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell

#### SXCCE/CIR/ IQAC/244

17-09-2021

### Circular Benchmarks 2021-2022

The following are the Benchmarks set for the academic year 2021-2022.

**BM-1:** Departments conduct at least one value added course of minimum 30 period duration for every student in an academic year.

BM-2: Every student undergoes Mini Project, Field Project and Internship, preferably one in an academic year starting from first year to pre-final year.

BM-3: Feedback on syllabus be strengthened by collecting feedbacks from faculty members, final year students, alumni, and employers.

BM-4: Graduation rate be greater than or equal to 90%.

BM-5: Minimum expected UG pass percentages are

BM-5.1: Final Year 95% for subject and 90% for class

BM-5.2: Third Year 90% for subject and 80% for class

BM-5.3: Second Year 80% for subject and 70% for class

BM-5.4: First Year 80% for subject and 70% for class

BM-6: Each department applies for at least 2 major projects from funding agencies.

BM-7: Departments take steps to start center of excellence. At least two departments start center of excellence.

BM-8: Departments take steps to start consultancy work and generate income.

BM-9: Institute starts skill development center.

BM-10: At least five incubates utilize the college incubation center.

**BM-11:** Motivation and guidance for GATE be strengthened starting from first year.

BM-12: Placements of master degree students be improved.

BM-13: Sports Council and other Co-curricular and extracurricular cells train students to achieve awards in university, state, national and international levels.

BM-14: All the co-curricular and extracurricular cells conduct at least 4 valuable physical/online programs in a year.

BM-15: Faculty members complete online course on entrepreneurial processes.

All are requested to render their support and cooperation to achieve the Benchmarks.

## St. Xavier's Catholic College of Engineering, Chunkankadai

## Benchmark Achievement Status 2021-2022

- √ 25 value added certification courses were conducted and 792 students have completed
- ✓ All the III year students completed mini project. 41 students from civil department undergone inplant training. Around 270 students have undergone internship.
- Curriculum feedback was collected and analyzed from passed out students, faculty, alumni, parents and employer.
- ✓ Overall graduation rate for the 2021 batch is 96.64 %.
- ✓ 54% of courses and 50% overall class results satisfied the set benchmark condition.
  - o In the I year out of 144 courses 31 courses secured above 80% and for overall class percentage, one out of 18 produced above 70%. In the II year out of 161 courses 94 courses secured above 80% and for overall class percentage, 9 out of 18 produced above 70%.
  - o In the III year out of 166 courses 89 courses secured above 90% and for overall class percentage, 9 out of 18 produced above 80%.
  - o In the IV year out of 105 courses 100 courses secured above 95% and for overall class percentage, 17 out of 18 produced above 90%.
- ✓ Around 6 major and 3 minor projects have been applied.
- ✓ Mechanical and EEE department planned and taken initiatives to start Energy related Centre of Excellence.
- ✓ Through consultancy work, Mechanical department earned Rs. 5000/- and through testing Civil department generated income of about Rs. 3,02,360/-.
- ✓ Through MSME 5 projects were applied for funding.
- ✓ 71 students registered for GATE 2022.
- ✓ Other than MBA and MCA, 3 placement drives, 2 training programmes were conducted for PG students. 2 students got placement offers.
- ✓ In sports 4 State, 2 University and 2 District level awards were received by our students. Also, our students won 4 National, 4 State and 4 District level awards in co-curricular and extra-curricular activities.
- ✓ 15 cells have conducted more than 4 programs.
- ✓ 137 faculty members have completed online course on Entrepreneurship and Startup.

**IQAC** Coordinator

Dr. J. ANNROSE, M.E., Ph.D., Co-ordinator of IQAC St. Xavier's Catholic College of Engineering Chunkankadai, Nagercoil - 629 003 Principal

Dr. J. MAHESWARAN, M.E. Ph.D. FIE. MISTE.
PRINCIPAL
SLXAVIER'S CATHOLIC COLLEGE OF ENGINEERING
CHUNKANKADAI
NAGERCOIL - 629 003

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell IQAC Meeting

Date: 14-05-2022

Time: 10:00 a.m. to 9.1.00 pm Venue: Board Room

#### **Members Present**

Sl. No.	Members Present	Signatura
	Name	Signature
1.	Rev. Fr. Dr. M. Maria William, Correspondent	CW Might
2.	Dr. J. Maheshwaran, Principal	90 to 14.5. W
3.	Rev. Fr. M. Francis Xavier, Bursar	fr. Rmit
4.	Dr. S.L. Rayar, Member - Local Society	Al Do
5.	Mr. M. Prince Paul Raj, Member - Industrialist	7_
6.	Dr. D. Anto Sahaya Dhas, Member - Alumni	_
7.	Dr. V. Christus Jeya Singh, Vice Principal &Dean-Student Affairs	2 M
8.	Dr. M. Marsaline Beno, Dean-Research	Dha
9.	Dr. A. Milton, Controller of Examinations	Amita
10.	Dr. R.S. Shaji, Dean – Systems	Castan V
11.	Dr. R.P Anto Kumar, Dean - Academics	Holde
12.	Mr. M. Anto Xavier Roche, Dean – Student Futuristic Services	A.
13.	Ms. J. Jencewin	Lenuly
14.	Ms. A. Bamila Virgin Louis	By.
15.	Dr. M. Gerald Arul Selvan	Want
16.	Ms. V. Femila Savio	N Louisi
17.	Ms. N. Ansgar Mary	Ula
18.	Ms. D. Smiline Shiny	A STORY
19.	Ms. W. Vinil Dani	10. V-9 10 -
20.	Dr. A. Ludvin Felcy	So
21.	Mr. K. Maria Vinu	1/m
22.	Mr. P.T. Justin Thiraviam	Sex
23.	Mr. Reginold Leon Wilson	Rleon
24.	Ms. M. Aamila Fathima	-
25.	Dr. J. Annrose, Coordinator-IQAC	Him

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell Minutes of the Meeting of IQAC Members

The meeting of Members of IQAC was held on 14-05-2022 in the Board Room from 10:15 a.m. to 2:00 p.m. The following members were present in the meeting.

- 1. Rev. Dr. M. Maria William, Correspondent
- 2. Dr. J. Maheshwaran, Principal and Chairperson
- 3. Rev. Fr. M. Francis Xavier, Bursar
- 4. Dr. S.L. Rayar, External Member
- 5. Dr. V. Christus Jeya Singh, Vice Principal & Dean Student Affairs
- 6. Dr. M. Marsaline Beno, Dean Research
- 7. Dr. A. Milton, CoE
- 8. Dr. R.S. Shaji, Dean Systems
- 9. Dr. R.P. Anto Kumar, Dean Academic
- 10. Dr. Anto Rooche Xavier, Dean Student Futuristic Services
- 11. Ms. J. Jencewin, Assistant Professor/MCA
- 12. Ms. A. Bamila Virgin Louis, Assistant Professor/CSE
- 13. Dr. M. Gerald Arul Selvan, Assistant Professor/ME
- 14. Ms. V. Femila Savio, Assistant Professor/ECE
- 15. Ms. N. Ansgar Mary, Assistant Professor/IT
- 16. Ms. D. Smiline Shiny, Assistant Professor/CE
- 17. Ms. W. Vinil Dani, Assistant Professor/EEE
- 18. Dr. A. Ludvin Felcy, Assistant Professor/H&S
- 19. Mr. K. Maria Vinu, Assistant Profesor/MBA
- 20. Dr. J. Annrose, Coordinator

The principal welcomed the members, and in his introductory remarks, he shared the following information with the members and introduced the agenda.

- ➤ I ME classes started on 7th February and 14th May is the last working day
- UG higher semester classes started on 10th March
- > UG second semester classes started on the 4th of April
- > II Sem MCA bridge classes commenced last Monday
- An autonomous inspection was held on the 19th and 20th of April 2022 and waiting for the results.

- ➤ Initially, 12 MSME innovative ideas were reviewed by an expert team and 5 ideas were submitted to the MSME portal.
- Research Centre extension for Civil and Physics departments were submitted with Anna University and preparing to apply for new research center status for IT Department.
- College day, sports day, and graduation day were celebrated on the 20th, 21st of April, and May 7th respectively.
- > Department-level symposiums are going on.
- Education tour and IV for second and third years were also completed.
- A short faculty meeting is organized every Monday.
- ➤ Various events are conducted regularly by all the professional and non-professional cells.
- Our students received 331 placement offers from 221 companies with the highest salary package of 6L and an average salary of 2.8 Lakh.
- Internal mock inspections for EEE, ECE, and HSC departments were conducted on the 13<sup>th</sup> and 16<sup>th</sup> for the MECH dept. and it was evaluated by two expert members each.
- ► 6 R & D projects were reviewed and submitted to 3 funding agencies. 1 with CDAC, 2 with SERB, and 3 with TNSTC.
- This year a new program is applied with AICTE for B.Tech (AI and DS) and also planned to increase the intake for an MBA from 60 to 120. In this regard, we shall expect Anna University inspection on May 19th and a surprise visit by the AICTE.
- ➤ University results for the PG program, all the 3rd sem ME except structural engineering produced 100% and for ME(SE) 93.75%, 3rd Sem MBA 92.45% and third year MCA 100%, II year MCA 48.78% percentage.
- Five colleges were visited related to autonomous practices and implementation. On 12th May we had a meeting to share the observations and feedback based on 7 categories. The next phase will be on today afternoon.

#### Agenda

- > Presentation of the Previous Meeting Minutes and Approval
- ➤ Benchmarks 2021-2022 Achievement Status and Outcome
- Non-academic stock audit
- > Teacher Quality Improvement
- Result Analysis

- > Staff Performance Evaluation and Implementation
- Outreach- Extension Activities
- Curriculum feedback Implementation
- New Student member selection
- ➤ College Ranking- NIRF, ARIIA
- > Others

#### Presentation of the Previous Meeting Minutes and Approval:

The coordinator of IQAC presented the minutes of the meeting held on 12-02-2022 and the minutes were approved by the members.

#### Action Taken Report for the previous meeting

- From next year onwards, it is planned to release the Newsletter monthly.
- A research scrutinizing committee was formed to review the proposals and ideas.
- The mechanical department IQAC coordinator was asked to submit the plan for the Center of Excellence in alternate energy within two weeks.
- MOOC course creation and submission will be processed during the semester's end.
- ELTAI programs for school teachers will be conducted after the valuation of the 9th, 10th, 11th, and 12th classes.
- > Student Futuristic Services Dean describes the PG students' placement details.
- The energy audit status report has to be submitted by the in charge.
- Report and Plan of COE, Academic, Research, Students Affairs, IQAC, Futuristic Services activities:
  - CoE presented the detailed plan for the establishment of the examination and evaluation process.
  - o Dean Research described the plan of research policy and procedures.
  - Dean Students Affairs briefed the report on students' non-academic activities and also the NIRF score.
  - Dean Systems presented the plan for digitizing the campus.
  - Dean Academics explained the new regulation and curriculum formation process and plan.
  - o IQAC coordinator described the audits and accreditation process.

o Student Futuristic Services Dean explained the plan about the Incubation, MSME, EDC, IIC, ARIIA, Industry- Institute App, and Knowledge Partner.

#### Benchmarks 2021-2022 Achievement Status:

Department IQAC members of CE, CSE, EEE, ECE, IT, ME, MCA MBA, and H&S presented the achievement status of the Benchmarks.

#### **Discussions and Decisions:**

- Data for NIRF 2021-2022 has been submitted by IQAC.
- Now, Newsletter is released quarterly. Releasing newsletters monthly can be done after one year.
- > Dean-Research will decide on scrutinizing the students' project applications for funding.
- ➤ It is decided to start the Center of Excellence on Bio-Energy in the Department of Mechanical Engineering. The Department of Mechanical Engineering is asked to prepare the plan and submit it to the Management.
- > Improvement Tests can be conducted after working hours.
- > A few faculty members have applied for creating MOOC courses.
- > English faculty members can be used for ELTAI to train school teachers.
- Research schemes from MHRD can be checked by Dean-Research.
- Shodh Shuddhi's access to plagiarism detection software "Ouriginal" can be used. Anna University provides this plagiarism check facility to its research supervisors to check the research papers/thesis of the research scholars.
- ➤ 2 placement training and 3 placement drives for PG students have been arranged.
- ➤ Conducting Co-curricular and extracurricular events in online mode is not effective as the students' participation is not active.
- The energy audit done by the Department of EEE and EnSav Club was briefly explained. The detailed report will be submitted to the management by the team.
- For Green Audit has been done by an external green auditor. Department of Civil Engineering was assigned to undertake the green audit.
- > It is decided to collect the curriculum feedback from the stakeholders.
- Non- academic audit can be scheduled by discussing with the Principal.
- > It was decided to select a new student member from ECE department.

The correspondent thanked the external and internal members and the meeting came to an end at 2:00 p.m.

Dr. J. Annrose

Coordinator

Dr. J. Maheswaran

Chairperson

Rev. Dr. M. Maria William

Correspondent

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell IQAC Meeting

Date: 12-02-2022

Time: 10:00 a.m. to 2:00 pm Venue: Board Room

#### **Members Present**

Sl. No.	Name	Signature
1.	Rev. Fr. Dr. M. Maria William, Correspondent	Nallano
2.	Dr. J. Maheshwaran, Principal	Andrew
3.	Rev. Fr. M. Francis Xavier, Bursar	Fr. Port
4.	Dr. S.L. Rayar	Albon 1
5.	Mr. M. Prince Paul Raj	_
6.	Dr. D. Anto Sahaya Dhas	
7.	Dr. M. Marsaline Beno, Vice Principal	Thinke 12/2/2
8.	Dr. V. Christus Jeya Singh, Dean-Student Affairs	Jan 1
9.	Dr. R.S. Shaji, Dean-Research	Vanalya
10.	Ms. J. Jencewin	Franklim.
11.	Ms. A. Bamila Virgin Louis	Ba.
12.	Dr. M. Gerald Arul Selvan	in Out.
13.	Ms. V. Femila Savio	Dam
14.	Ms. N. Ansgar Mary	1160
15.	Ms. D. Smiline Shiny	
16.	Ms. W. Vinil Dani	W. N-PD-
17.	Dr. A. Ludvin Felcy	20
18.	Mr. K. Maria Vinu	MM
19.	Mr. P.T. Justin Thiraviam	-
20.	Mr. Reginold Leon Wilson	1
21.	Ms. M. Aamila Fathima	_
22.	Dr. A. Milton, Coordinator-IQAC	Annili

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell Minutes of the Meeting of IQAC Members

The meeting of Members of IQAC was held on 12-02-2022 in the Board Room from 10:15 a.m. to 2:00 p.m. The following were the members present in the meeting.

- 1. Rev. Dr. M. Maria William, Correspondent
- 2. Dr. J. Maheshwaran, Principal and Chairperson
- 3. Rev. Fr. M. Francis Xavier, Bursar
- 4. Dr. S.L. Rayar, External Member
- 5. Dr. M. Marsaline Beno, Dean-Academic
- 6. Dr. V. Christus Jeya Singh, Dean Student Affairs
- 7. Dr. R.S. Shaji, Dean Research
- 8. Ms. J. Jencewin, Assistant Professor/MCA
- 9. Ms. A. Bamila Virgin Louis, Assistant Professor/CSE
- 10.Dr. M. Gerald Arul Selvan, Assistant Professor/ME
- 11.Ms. V. Femila Savio, Assistant Professor/ECE
- 12.Ms. N. Ansgar Mary, Assistant Professor/IT
- 13.Ms. D. Smiline Shiny, Assistant Professor/CE
  - 14.Ms. W. Vinil Dani, Assistant Professor/EEE
  - 15.Dr. A. Ludvin Felcy, Assistant Professor/H&S
  - 16.Mr. K. Maria Vinu, Assistant Profesor/MBA
  - 17.Dr. A. Milton, Coordinator

Principal welcomed the members, and in his introductory remarks he shared the following information with the members and introduced the agenda.

AQAR 2020-2021 was submitted on 13-01-2022 and resubmitted on 28-01-2022. The AQAR has been accepted by NAAC.

Validity of the Cycle-1 NAAC accreditation is till September 2022. Therefore, SSR work for Cycle-2 accreditation has to be started.

NBA has requested the UG programs EEE, ECE and ME to submit compliance report with CAY as 2021-2022.

Inspection for autonomous status of the college is postponed due to Covid, heavy rain and again due to Covid. The inspection will be conducted after the lock down relaxations.

Our students have secured 11 university ranks. 1 UG and 10 PG ranks with 4 Gold Medals.

SX/IQAC/12 Page 2 of 7

In ARIIA 2019-2020 ranking, our college is placed in the Promising Band.

NSS units of the college secured Best NSS Unit award and 2 Best NSS Volunteer award from Anna University Chennai.

Higher semester UG students are writing university examination in Take Home Mode.

PG students will have Pen and Paper Mode university examinations from 21-02-2022.

Short meeting of all faculty members is being conducted on every Monday from 8:30 a.m. to 8:45 a.m.

#### Agenda

Presentation of the Previous Meeting Minutes and Approval

Report of Academic Activities

Report of Research Activities

Report of Students Affairs Activities

Benchmarks 2021-2022 Achievement Status

Energy and Green Audit Status

Draft Questions for Curriculum Feedback from Stakeholders

## Presentation of the Previous Meeting Minutes and Approval:

Coordinator of IQAC presented the minutes of the meeting held on 04-12-2021 and the minutes were approved by the members.

## Report of Academic, Research and Students Affairs activities:

Dean Academics presented the report of the academic activities. The report is attached as Annexure-I.

Dean Research presented the report of the research activities. The report is attached as Annexure-II.

Dean Students Affairs presented the report of students' non-academic activities. The report is attached as Annexure-III.

#### Benchmarks 2021-2022 Achievement Status:

Department IQAC members of CSE, EEE, ECE, IT, ME, MBA, MCA, H&S and CE presented the achievement status of the Benchmarks.

#### **Discussions and Decisions:**

o Data for NIRF 2020-2022 has been submitted.

- Now, Newsletter is released quarterly. Releasing Newsletter monthly can be done after one year.
- Dean-Research will decide on scrutinizing the students' project applications for funding.
- o It is decided to start Center of Excellence on Bio-Energy in the Department of Mechanical Engineering. Department of Mechanical Engineering is asked to prepare the plan and submit it to the Management.
- o Improvement Tests can be conducted after working hours.
- o A few faculty members have applied for creating MOOC courses.
- o English faculty members can use ELTAI to train school teachers.
- o Research schemes from MHRD can be checked by Dean-Research.
- O Shodh Shuddhi access to plagiarism detection software "Ouriginal" can be used. Anna University provides this plagiarism check facility to its research supervisors to check the research papers/thesis of the research scholars.
- o 2 placement trainings and 3 placement drives for PG students have been arranged.
- Conducting Co-curricular and extracurricular events in online mode is not effective as the students' participation is not active.

#### **Energy and Green Audit Status**

14/5/2022

Energy audit done by the Department of EEE and EnSav Club was briefly explained. Detailed report will be submitted to the management by the team.

Green Audit has been done by external green auditor. Department of Civil Engineering was asked to become eligible for green audit and to undertake the audit. But they feel difficult to move further towards doing Green Audit.

## Draft Questions for Curriculum Feedback from Stakeholders

It is decided to circulate the drafted feedback questions by email to get the members' suggestions.

Correspondent thanked the external and internal members and the meeting came to an end at 2:00 p.m.

Dr. ADMitton

Coordinator

Dr. J. Maheswaran

Chairperson

Rev. Dr. M. Maria William

S. MUND

Correspondent

#### Annexure-I

- Report from Dean Academic
  (5th December to 12<sup>th</sup> February 2022)

  1. For First year UG Classes- Online classes conducted from 10<sup>th</sup> January to 31<sup>st</sup> January 2022 and Physical classes started from 1st February 2022
- 2. For Senior UG Classes- Revision classes and Unit wise model exams were conducted from 10<sup>th</sup> January to 31<sup>st</sup> January 2022

#### 3. Association Activities:

- a. ACE 13+5
- b. ELECTROS 5+2
- c. SEE
- 6
- d. REACH
- 3 + 1
- e. BRIGITZ
- f. MEGX7
- g. SHAX
- 3+1
- h. MBA i. MCA
- 2+1
- 4. Spoken Tutorial

EEE 40 students registered

Mechanical 29 students registered

IT 116 students registered

CSE 103 students registered

23 EEE students have ongoing projects in eSim

2 Mechanical students have ongoing projects in SCILAB

#### 5. NPTEL

Category	Jan-April 2021	July-Dec 2021	Jan-April 2022 (current sem)
Total Enrollments	182	175	158
Total Registrations	16	14	Nil
Total Course Completions	12	8	
No.of Toppers	1	0	
No.of Elite+Gold Medals	1	0	
No.of Elite+Silver Medals	5	3	
No.of Elite	3	3	
No.of Successfully Completed	3	2	
No.of mentors received Certificate	0	0	
Active SPOC Award	Yes		
Active Local Chapter	Y		

6. AICTE 360 feedback: faculty participation and waiting for students feedback

#### 7. IIC ACTIVITIES

Institution Innovation Council (IIC) of SXCCE conducted an orientation session on Innovation and startup on 09-12-2021. Mr.P.S.Sailesh, District Development Manager, NABARD presided over the function and gave a talk on NABARD and its importance in Rural Development. Er. V. N. Shiju, Managing Director, Ethamozhy Coir Cluster Pvt. Ltd. enriched the students about the importance of Entrepreneurship and gave awareness about the steps involved in becoming a successful Entrepreneur.

3 ONLINE WEBINARS CONDUCTED BY IIC
Virtual visit to Anna University ATAL Incubation Centre
Exposure visit to RMK College by 2 faculty members
ARIIA RANKINGS – PROMISING BRAND for 2019-20

- 8. The Inauguration of I year MCA was held on 17.12.2021 and I year ME was held on 7<sup>th</sup> February 2022
- 9. Communication skill development

#### 1. Bridge Course on Communication Skills

Bridge Course on Communication Skills was conducted during the first two weeks before the commencement of the first year regular classes.

- 2. Communication Skills Training (Semesters 1 & 2)
  - This training course is conducted for all first year students during their first and second semesters. The course enlightens the students about the fundamentals required to develop the language skills.
- 3. The English Language Teacher's Association of India (ELTAI)
  - Our institution and the faculty members of English have become the members of ELTAI in the month of February 2022. The purpose of this membership is to get access with the national and international language teachers / trainers and to update the standard of language teaching.
- 4. MCA I Year Audit Course: Communication Skills Enhancement
- 5. ME I Year Audit Course: English for Research Paper Writing

Dean Academic

#### Annexure-II

#### Report from Dean Research

- 1. Research Policy: SXCCE Research Policy draft is circulated among the Deans, HoDs and Department Research Coordinators on 11-02-2022 for getting valuable suggestions for enhancement and then for finalizing.
- 2. Project Orientation of PG I year: It is supposed to conduct an orientation programme to all the First year PG programme students to do quality projects on the 3rd week of February, 2022. Now it is suggested that a FDP titled 'National Level Virtual FDP on Research Methodology and IPR' will be conducted from 21st February, 2022 onwards by the Department of Civil Engineering and that will cover the proposed topics designed in the orientation programme and so the programme may be cancelled after having a discussion with the Principal in this regard.
- 3. Anna University Chennai, PhD Admission: In the January 2022 session of Ph.D. Admissions by Anna University Chennai, 11 scholars are admitted in the various research centres of our institution comprising both part-time and full-time scholars (03 numbers) including our faculty members.
- 4. Project Proposals to Funding Agencies: Project proposals call for from the funding agencies, especially from DST-SERB, is circulated among the faculty members. One project proposal to DST-TDP (Technology Development Programme) is applied. Previously applied project proposal to AICTE-RPS (Research Promotion Scheme) is qualified for funding of worth Rs.8.5 Lakhs. Project proposals to the AICTE schemes MODROB and RPS are ready with the departments and faculty members respectively.
- 5. Research Centre: Department of Chemistry can apply to become Research Centre status by Anna University, Chennai once the awaited journal publication from a faculty (for becoming an eligible supervisor) is published in a journal(already it is accepted to publish in the Annexure-I journal list of Anna University, Chennai). The department has already one research supervisor in its account. Further, constant assistance and awareness is given to the faculty members from the Department of Management Studies and Department of Mathematics to get satisfied the eligibility condition to make their departments as a recognized research centres by Anna University, Chennai.
- 6. Research Activities at SXCCE: Research activities which are undergoing in the various departments are presented by the respective Department Research Coordinator before the Correspondent and Principal on 11th February, 2022. As well as, the research activities which are undergoing in the various research groups by individually or by groups will be presented on 13th and 14th of February, 2022. Also it is supposed to conduct an audit on the Design phases of the individual research plan by the 3rd week of March, 2022.
- 7. Patents: Six more patents are filed by our faculty under the affiliation of our institution within this period.
- 8. Techfest 2022: It is decided to exhibit both the products developed by the students in the form of software and hardware by the students in the Techfest 2022 event.

Dean Research Rh

#### Annexure-III

#### Report from Dean Student Affairs

#### I. Admission 2022-2023:

- ❖ Different committees were constituted to take care of the admission activities and a meeting for the core members was held on 12.01.2022 and the process of admission 2022-2023 was initiated.
- Willingness registration form was prepared (both paper and online) and digital poster with all necessary details was shared in the media.
- A meeting for the sub committees for the promotional activities for the Kottar and Kuzhithurai dioceses was conducted on 03.02.2022 and discussed about various strategies.

#### II. GATE Motivation:

- Instruction was given to write all the registered students to write the GATE Exam through the faculty members and about 70 students are writing the exam.
- Orientation to First Year students is scheduled from 14.02.2022.

#### III. NIRF 2022:

Registration for the ranking 2022 was done on 09.02.202

#### IV. Scholarship:

A meeting with faculty in-charge of students' welfare cell was conducted and asked to help students and follow up the progress of application and asked to give the report.

#### V. Cell Activities:

a. Around 28 activities were conducted during 2021-2022

**Dean Student Affairs** 

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell IQAC Meeting

Date: 04-12-2021

Time: 10:00 a.m. to 2:00 P.m.

Members Present

Venue: Board Room

Sl. No.	Name	Mgnature
1.	Rev. Fr. Dr. M. Maria William, Correspondent	Crolling
2.	Dr. J. Maheshwaran, Principal	B1002.21
3.	Rev. Fr. M. Francis Xavier, Bursar	-Fr. Barofr
4.	Dr. S.L. Rayar	Along !
5.	Mr. M. Prince Paul Raj	mus
6.	Dr. D. Anto Sahaya Dhas	1
7.	Dr. M. Marsaline Beno, Vice Principal	Bhohe
8.	Dr. V. Christus Jeya Singh, Dean-Student Affairs	
9.	Dr. R.S. Shaji, Dean-Research	A CONTRACTOR OF THE PARTY OF TH
10.	Ms. J. Jencewin	Flerillin'
11,	Ms. A. Bamila Virgin Louis	any
12.	Dr. M. Gerald Arul Selvan	nhardt
13.	Ms. V. Femila Savio	Warms.
14.	Ms. N. Ansgar Mary	Me
15.	Ms. D. Smiline Shiny	f. lea
16.	Ms. W. Vinil Dani	w.v.207
17.	Dr. A. Ludvin Felcy	2 di
18.	Mr. K. Maria Vinu	
19.	Mr. P.T. Justin Thiraviam	28×
20.	Mr. Reginold Leon Wilson	Chor
21.	Ms. M. Aamila Fathima	
22.	Dr. A. Milton, Coordinator-IQAC	Annelio

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell Minutes of the Meeting of IQAC Members

The meeting of Members of IQAC was held on 04-12-2021 in the Board Room from 10:00 a.m. to 2:00 p.m. The following were the members present in the meeting.

- 1. Rev. Dr. M. Maria William, Correspondent
- 2. Dr. J. Maheshwaran, Principal and Chairperson
- 3. Rev. Fr. M. Francis Xavier, Bursar
- 4. Dr. S.L. Rayar, External Member
- 5. Mr. M. Prince Paul Raj
- 6. Dr. M. Marsaline Beno, Dean-Academic
- 7. Dr. V. Christus Jeya Singh, Dean Student Affairs
- 8. Dr. R.S. Shaji, Dean Research
- 9. Ms. J. Jencewin, Assistant Professor/MCA
- 10.Ms. A. Bamila Virgin Louis, Assistant Professor/CSE
- 11.Dr. M. Gerald Arul Selvan, Assistant Professor/ME
- 12.Ms. V. Femila Savio, Assistant Professor/ECE
- 13.Ms. N. Ansgar Mary, Assistant Professor/IT
- 14.Ms. Porcia, Assistant Professor/CE
- 15.Ms. W. Vinil Dani, Assistant Professor/EEE
- 16.Dr. A. Ludvin Felcy, Assistant Professor/H&S
- 17.Mr. K. Maria Vinu, Assistant Profesor/MBA
- 18.Mr. P.T. Justin Thiraviam, Office Superintendent
- 19.Mr. Reginold Leon Wilson, Student/ME
- 20.Dr. A. Milton, Coordinator

Principal welcomed the members. And shared the following information with the members

IIC of our institute bagged 3.5 star rating from Innovation Cell of Ministry of Education, Government of India for our activities on Innovation, IPR, Incubation and Entrepreneurship. Principal Congratulated Dr. M. Marsaline Beno and Dr. D. Judson.

Our Institution was selected for hosting IIC impact lecture series on the areas of Innovation, IPR, Incubation and Entrepreneurship. We have arranged 2 series with 4 lectures by leading academician and entrepreneurs.

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Our college is the recognized skill development center of NSDC and affiliated to Indian Centre of Research and Development for Technical Education, Chennai.

#### Agenda

Presentation of the previous meeting minutes and approval Review of Academic, Research and Students Affairs activities Benchmarks 2021-2022 Strategies

#### Presentation of the Previous Meeting Minutes:

Coordinator of IQAC presented the minutes of the meeting held on 28-08-2021.

Dr. S.L. Rayar suggested changing period to hour in benchmark-1 (BM-1). It was decided to read the BM-1 as "Departments conduct at least one value added course of minimum 30 hours duration for every student in an academic year."

The minutes were approved by the members.

### Review of Academic, Research and Students Affairs activities:

Dean Academics presented the academic activities. The report is attached as Annexure-I.

Dean Research presented the research activities. The report is attached as Annexure-II.

Dean Students Affairs presented a report. The report is attached as Annexure-III.

## Benchmarks 2021-2022 Strategies of Departments:

Department IQAC members explained the strategies for achieving the Benchmarks and the current status of the achievements.

#### Other Discussions and Decisions:

- The institute's score in NIRF is 24.4
- Three students were given Rs. 50,000 each as their parent passed away.
- ➤ Group insurance scheme has been implemented in 2021-2022.
- > Students' project proposal for funding can also be scrutinized by the project scrutinizing committee.
- More initiatives and training needed for starting center of excellence.
- Newsletter can be released every month.

- Dean Academics will coordinate with the communication trainer to start communication classes for PG students.
- Departments are motivated to work for setting up industry supported laboratory.
- Respective deans need to coordinate the activities for the achievement of BMs related to the cells.

Correspondent thanked the external and internal members and the meeting came to an end at 2:00 p.m.

12102)22 Dr. A. Milton

Coordinator

Dr. J. Maheswaran Chairperson

Rev. Dr. M. Maria William Correspondent

#### Annexure-I

#### Academic Activities 2021-2022 Odd Semester

- 1. Online classes conducted from 8<sup>th</sup> August and Physical classes started from September 1, 2021
- 2. 5 Unit Tests, 5 Improvement tests and one Model Exam is planned to be conducted in this semester.
- 3. Total Department Association Activities: 52

a.	ACE	13
b.	ELECTROS	5
c.	SEE	6
d.	REACH	3
e.	BRIGITZ	5
f.	MEGX	7
g.	SHAX	3
h.	MBA	8
i.	MCA	2

4. Academic performance rank released by Anna University

Year/Month	Appeared Students	All Clear	Pass %	Rank
May 2014	2090	1464	70.05 %	100
Dec 2014	2120	1412	66.6%	83
May 2015	2100	1512	72 %	89
Dec 2015	2139	1272	59.47 %	114
May 2016	2127	1445	67.94 %	207
Dec 2016	2057	1242	60.38 %	180
May 2017	2051 -	1255	61.19 %	125
Dec 2017	2039	706	34.62 %	216
May 2018	2013	967	48.04 %	164
Dec 2018	1872	596	31.85 %	175
May 2019	1859	861	46.32 %	129
Dec 2019	1756	642	36.56 %	119
May 2020	1741	1732	99.48 %	88*
Dec 2020	1657	1606	96.92 %	118*

<sup>\*</sup> many colleges are with the same pass percentage. The rank is based on alphabetical order.

- 5. Department of EEE conducted Anna University sponsored FDP on Power System Analysis during July 2021. AU sponsored Rs. 30,000.
- 6. IIT Bombay Spoken Tutorial Number of students registered:

EEE - 43

Mechanical - 24

IT and CSE is planning for all the students

Two coordinators identified from H&S.

For around 100 students who registered for the courses in the last semester, examinations were conducted.

FOSSEE ongoing projects:

- 23 EEE students are having projects in eSim
- 2 Mechanical students are having projects in SCILAB
- 7. NPTEL Courses

	July-	Jan-	July-	Jan-April	Jan-	Jan-	July-
Category	Oct	April	Oct	2020	Dec	April	Dec
	2018	2019	2019	2020	2020	2021	2021
Total Enrollments	133	344	614	509	323	182	175
Total Registrations	20	67	136	77	40	16	10
Total Course Completions	20	65	104	72	32	12	6
No.of Toppers	1	9	5	Madical	1	1	0
No.of Elite+Gold Medals	1	13	3	Modified	1	1	0
No.of Elite+Silver Medals	5	17	22	Pass Certificate	3	. 5	2
No.of Elite	7	15	47	based on	11	3	3
No. of Successfully Completed	7	20	32	Assignment	16	3	1
No.of mentors received Certificate	0	0	2	score	1	0	0

- 8. Faculty members attended 3 FDPs in NIT Trichy under Margadarshan Mentee scheme.
- 9. FOSSEE club has been approved by IIT Mumbai
- 10.IIRS-ISRO REMOTE CENTETRE has been approved
- 11.CII Membership has been approved
- 12. Skill Centre (ICRDE) has been approved
- 13.MSME Host Institute approval awaiting
- 14.IIC- 3.5 Golden stars received for the last academic year
- 15. One faculty member attended NITTTR's mentor training.
- 16. Around 20 faculty members have attended AICTE's Exam reform training.
- 17. Three faculty members attended SERB- Karyasala FDP
- 18. Work is in the final stage for AICTE 360 feedback
- 19. Induction program for new faculty members & mentors assigned
- 20.Dr. S V Kayalvizhi is appointed as the coordinator for value education
- 21. Value Added Courses Department wise coordinators identified
- 22. Draft academic Regulation prepared for the autonomous status

Dean Academic

Annexure-II

# Research Activities held and under implementation during the 2021-2022 ODD Semester

#### 1. Research Policy

SXCCE Research Policy is finalized on 22-11-2021 including all the research based responsibilities to be fulfilled by the Faculty, Scholar (both full-time and part-time) and student, Research Performance Indices by Faculty, conductance of research by scholar and academic projects by student.

#### 2. Research Centre

We have to apply for the renewal of Physics Research centre. Two Annexure-I papers from physics supervisors are available. Yet a student has to register under the physics research centre. For chemistry, one supervisor is available and one more supervisor will apply for the supervisorship as her SCI indexed paper is in the acceptance status. There is no chance for becoming as research centres by Mathematics, English and MBA for the next one year. For civil research centre renewal, the query for the non-compliance put by the University has been answered and sent to the Centre for Research, Anna University Chennai.

### 3. Supervisorship

One faculty applied from the IT department and was rejected by the Centre for Research, Anna University, Chennai. Four more faculties from various departments are waiting to fulfil the eligibility condition since their papers are in the acceptance state and DOI yet to be published.

## 4. SCI Authors

17 papers published in web of science through online or print mode and eleven papers are accepted for publication in web of science indexed journals.

## 5. Research Group

Two research audits have been conducted on verifying the outcomes of the research plan prescribed by every faculty member. Eighteen research groups are formed and seven more subgroups are newly formed within the main groups. Five group projects which are mainly considering the societal needs around us, under the research plans are under development and are ready for applying to the appropriate funding agencies call (02 from mechanical, 02 from CSE and 01 from MCA) and 03 patents are ready for applying from the research plans (02 from ECE and 01 from CSE).

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#### 6. Funded Projects

Three SERB projects are applied and are under review process of worth Rs. 43 Lakhs. One FIST project on Artificial Intelligence worth Rs. 60 Lakhs was applied to DST with CSE faculty as PI and Civil and IT faculties as COPIs. Among the three AICTE-RPS projects submitted, two projects are recommended for reviews. Now, one project worth of Rs. 08 Lakhs is provisionally selected for sanctioning. Among the two ACITE-MODROB projects submitted, none was selected. Two projects submitted by faculty members to TN state council for S&T worth about Rs. 06 Lakhs are currently in review process. One AICTE-IDEA Lab project worth Rs. 85 Lakhs was rejected after the presentation. Currently one AICTE-MODROB project from Mechanical and another from CSE is under development for submission.

#### 7. Ph.D.

Nine faculty members completed Ph.D. degree and seven faculty members applied for Ph.D. Degree for the coming session. Eleven faculty members have been selected for doing Ph.D. in both internal and external modes for the July, 2021 session. Nineteen faculty members are yet to register for Ph.D.

#### 8. Patents

Twelve patents are filed and three have been published according to the automation entries. Four previously published patents are under examine for the status of granting.

## 9. Outcome Based Project (OBP) orientation programme

OBP was conducted to the final year UG, MCA and MBA from 21-10-2021 to 25-10-2021 and to the final year ME students on 04-10-2021. OBP orientation is scheduled to the Pre-final year students of all the programmes from 06-12-2021 to 07-12-2021

<u>Awareness</u> on Research activities are given to all the faculty members through orientation programmes as well as in individual manner. Two such programmes have been conducted within the campus. In this year, twenty one callfors from various funding agencies are informed to the faculty members long before the last date of the submission of proposals.

All the data pertaining to the research activities can be taken from the automation software and the same are reflected in the website after refreshing the contents on the daily basis.

<u>Techfest 2022</u> information is given to the students for their better preparation.

<u>Citation count</u>, h-index and i10-index are considerably increased this year by the excellent contribution by our faculty members.

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<u>Head of the Department</u> of all the departments are informed to instruct their faculty members to keep profile in Vidwan Profile Page, Web of Science Researcher Link, Scopus Researcher Link and Google Scholar Research Link and the same may be submitted to the Dean-Research.

Dean Research

#### Annexure-III

### Report from Dean Student Affairs

#### I. Admission 2020-2021:

- Different committees were constituted to take care of the admission activities.
- \* Willingness for Pre-registration for admission was done through staff members and online.
- More than 200 schools and parishes were visited.
- \* Wide publicity was given regarding admission and merit scholarship exam through social media and leading newspapers.
- \* Following is the admission statistics:
  - First Year B.E:/B.Tech 473
  - Lateral Entry 69
  - PG (Engineering) 43
  - MBA & MCA 123
  - Transfer Students (UG) 2

#### \* Admission Analysis:

- Counselling Seat filled 73.93% (200 out of 270 Intake Seats)
- SC/ST Students admitted 13
- Muslim students admitted 25
- Students Admitted through SXMSE 30 (from 400+ appeared students and 51 eligible students)
- Diocese Quota students admitted 16

#### II. GATE Motivation:

- Motivation was given to all third and final year students by respective department GATE Coordinators and made them to register for Exam.
- \* Motivational PPT was prepared by Dean (Student Affairs) and circulated to the students.
- \* Registration Statistics: Total Registered Students 70 Branch-wise detail:
  - ME 13
  - EE 8
  - CS 7
  - IT 9

- EC 9
- CE 24
- Orientation to First Year students is also planned.
- III. Conducted a meeting for Vicariate Quota Students of II, III and IV Year UG on 15.11.2021 at 12.45pm and separately for I Year UG on 09.12.2021 at 12.30pm. The students are informed about our expectations on academic performance, discipline, and other skill development. They were also asked to contribute to students' welfare fund after their graduation.
- IV. Organized one Covid Vaccination camp for our students and staff on 07.09.2021. Ambetkar Colony people also got benefitted.

Dean Student Affairs

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell IQAC Meeting

Date: 28-08-2021

Time: 10:00 a.m. to .2:30 P.m.

Venue: Seminar Hall

#### **Members Present**

Sl. No.	Name	Signature
1.	Rev. Fr. Dr. M. Maria William, Correspondent	wallow)
2.	Dr. J. Maheshwaran, Principal	Rose
3.	Rev. Fr. M. Francis Xavier, Bursar	Fr- Romost
4.	Dr. S.L. Rayar	Abo.
5.	Mr. M. Prince Paul Raj	-
6.	Dr. D. Anto Sahaya Dhas	-
7.	Dr. M. Marsaline Beno, Vice Principal	Three.
8.	Dr. V. Christus Jeya Singh, Dean-Student Affairs	21
9.	Dr. R.S. Shaji, Dean-Research	OF IN
10.	Ms. J. Jencewin	Herselm
11.	Ms. A. Bamila Virgin Louis	OBEV.
12.	Dr. M. Gerald Arul Selvan	n Cent
13.	Ms. V. Femila Savio	1 Same
14.	Ms. N. Ansgar Mary	Who ?
15.	Ms. D. Smiline Shiny Ms. L. Porcia	Joc
16.	Ms. W. Vinil Dani	D.V-97-
17.	Dr. A. Ludvin Felcy	Lai
18.	Mr. K. Maria Vinu	ilm/
19.	Mr. P.T. Justin Thiraviam	
20.	Mr. Reginold Leon Wilson	_
21.	Ms. M. Aamila Fathima	Sanila Fathima.
22.	Dr. A. Milton, Coordinator-IQAC	Amila Fathima.

## St. Xavier's Catholic College of Engineering Internal Quality Assurance Cell Minutes of the Meeting of IQAC Members

The meeting of Members of IQAC was held on 28-08-2021 in the Seminar Hall, Albert Einstein Block from 10:00 a.m. to 2:30 p.m. The following were the members present in the meeting.

- 1. Rev. Dr. M. Maria William, Correspondent
- 2. Dr. J. Maheshwaran, Principal and Chairperson
- 3. Rev. Fr. M. Francis Xavier, Bursar
- 4. Dr. S.L. Rayar, External Member
- 5. Dr. M. Marsaline Beno, Dean-Academic
- 6. Dr. V. Christus Jeya Singh, Dean Student Affairs
- 7. Dr. R.S. Shaji, Dean Research
- 8. Ms. J. Jencewin, Assistant Professor/MCA
- 9. Ms. A. Bamila Virgin Louis, Assistant Professor/CSE
- 10.Dr. M. Gerald Arul Selvan, Assistant Professor/ME
- 11.Ms. V. Femila Savio, Assistant Professor/ECE
- 12.Ms. N. Ansgar Mary, Assistant Professor/IT
- 13.Ms. Porcia, Assistant Professor/CE
- 14.Ms. W. Vinil Dani, Assistant Professor/EEE
- 15.Dr. A. Ludvin Felcy, Assistant Professor/H&S
- 16.Mr. K. Maria Vinu, Assistant Profesor/MBA
- 17.Mr. P.T. Justin Thiraviam, Office Superintendent
- 18.Ms. M. Aamila Fathima, Student/CSE
- 19.Dr. A. Milton, Coordinator

The meeting to discuss the benchmarks 2020-2021 achievement status and to set benchmarks 2021-2022 started with the welcome address by the Principal.

Coordinator of IQAC presented the minutes of the meetings held on 27-02-2021 and 30-07-2021. The minutes were approved by the members.

## **Action Taken Report:**

- ✓ AQAR 2019-2020 review was submitted and it was approved by NAAC on 21-04-2021.
- ✓ NAAC Sponsored three day national level online workshop on "Course and Instruction Design for Effective Outcome Based Education" was conducted on 10, 11 and 12-06-2021.

- ✓ NBA expert team visit for the accreditation of the UG programs CE, CSE and IT was conducted on 09, 10 and 11-04-2021 in blended mode and NBA accreditation status letter dated 01-07-2021 has been received from NBA.
- ✓ Compliance report for the extension of validity of the accreditations of the UG programs EEE, ECE and ME have been submitted to NBA on and accreditation validity extension letter dated 15-07-202 has been received from NBA.

#### Achievement Status of the Benchmarks 2020-2021:

- ✓ 132 faculty members have completed online course on leadership.
- ✓ Workshop on Bloom's Taxonomy based teaching was conducted on 26-02-2021 and 06-03-2021 by IQAC and Teaching Development Cell.
- ✓ Dean-Student Affairs with the help of students' welfare cell collected the database of scholarships and it has been communicated to HODs.
- ✓ 367 students have completed online courses.
- ✓ Overall graduation rate of all the UG, MBA and MCA programs is 71% which will improve further after the results of the reexamination.
- ✓ 11 subjects in final year, 12 subjects in third year, 27 subjects in second year and 54 subjects in first year UG classes crossed the set subject pass percentages (as per BM-7).
- ✓ 87 students registered for GATE 2021.
- ✓ Around 8 major projects have been applied.

#### **Discussions and Decisions:**

- ➤ Institute's incubation center is registered with the registrar of societies of Kanyakumari district.
- Team from MSME-DI, Chennai visited the college on 12-08-2021 for MSME host institution status.
- ➤ Value added courses have to be conducted for more than or equal to 30 periods and more number of students have to be motivated to join the courses.
- English communication class can be provided to PG students also by the communication trainer.
- > Student members wanted the college to arrange internship for the students and internship can be made compulsory. Other suggestions provided by the student are
  - Online classes are not effective as physical classes.
  - Seminars by students can help students learn better and can create learning interest.
  - Taking notes is important for the students to learn better.
  - Students have to be active and the classes can be interactive.
- Office superintendent was asked to prepare audited statement as required by NAAC.
- > Discussed to create staff welfare cell.

The following are the benchmarks set for the academic year 2021-2022

#### Benchmarks 2021-2022:

BM-1: Departments conduct at least one value added course of minimum 30 period duration for every student in an academic year.

BM-2: Every student undergoes Mini Project, Field Project and Internship, preferably one in an academic year starting from first year to pre-final year.

BM-3: Feedback on syllabus be strengthened by collecting feedbacks from faculty members, final year students, alumni, and employers.

BM-4: Graduation rate be greater than or equal to 90%.

BM-5: Minimum expected UG pass percentages are

BM-5.1: Final Year 95% for subject and 90% for class

BM-5.2: Third Year 90% for subject and 80% for class

BM-5.3: Second Year 80% for subject and 70% for class

BM-5.4: First Year 80% for subject and 70% for class

BM-6: Each department applies for at least 2 major projects from funding agencies.

BM-7: Departments take steps to start center of excellence. At least two departments start center of excellence.

BM-8: Departments take steps to start consultancy work and generate income.

BM-9: Institute starts skill development center.

BM-10: At least five incubates utilize the college incubation center.

BM-11: Motivation and guidance for GATE be strengthened starting from first year.

BM-12: Placements of master degree students be improved.

BM-13: Sports Council and other Co-curricular and extracurricular cells train students to achieve awards in university, state, national and international levels.

BM-14: All the co-curricular and extracurricular cells conduct at least 4 valuable physical/online programs in a year.

BM-15: Faculty members complete online course on entrepreneurial processes.

Coordinator of IQAC thanked the members and the meeting came to an end at 2:30 p.m.

Coordinator

Dr. A. MILTON, B.E., M.Tech., Ph.D. Co-ordinator of IQAC St. Xavier's Catholic College of Engineering Chunkankadai, Nagercoil - 629 003.

Rev. Dr. M. Maria William Correspondent

Dr. J. Maheswaran Chairperson

Dr. J. MAHESWARAN, M.E. Ph.D. FIE. MISTE. PRINCIPAL SLXAVIER'S CATHOLIC COLLEGE OF ENGINEERING CHUMA A NAGE ..