SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

EXCEL ENGINEERING COLLEGE

NH-544, SALEM MAIN ROAD, PALLAKAPALAYAM, KOMARAPALAYAM, NAMAKKAL DT -637303.
637303
www.excelinstitutions.com/excel_engg/index.aspx

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Excel Engineering College, an Anna University affiliated institution located in Namakkal District, Tamil Nadu, is run by the SRET - **Sri Rengaswamy Educational trust**, which was established in the year 2001 with an aim to foster higher education for all and to provide excellent professional education in rural India to uplift the downtrodden communities.

The Excel Engineering College was established in the year 2007 with four UG Programmes with a total intake of 240 students and 28 faculty members; the college stands tall today by offering 9 UG programmes, 6 PG programmes and 3 research programmes with a strength of 2407 students and 193 faculty members. The 120 acres green campus is completely encompassed by a compound wall and 10.21 acres is earmarked for Excel Engineering College.

The College has been accredited by NAAC with B+ grade in 2016 and 4 UG programmes (AERO, CSE, ECE & MECH) have been accredited by National Board of Accreditation (NBA) in 2018. Anna University, Chennai has granted "Permanent Affiliation" status to **Mechanical Engineering** (ME), **Computer Science & Engineering** (CSE), **and Electronics & Communication Engineering** (ECE) and **Aeronautical Engineering** (AE). The Departments of **ME**, **CSE** and **ECE** have been recognized as "Research Centre" by Anna University for doing research works leading to Ph.D. degree.

MILE STONES OF SRI RENGASWAMY EDUCATIONAL TRUST

- Registration of Trust – SRET in 2001.
- Excel College of Education and TTI's in 2006, accredited by NAAC with 'A' grade, I Cycle.
- EDGE-Educational Guidance and Exhibition at Erode/Salem since 2004.

Excel Engineering College in 2007, accredited by NAAC with 'B+' grade, I Cycle and NBA (ECE, CSE, Mech. & AERO), 2(f) & 12(B) Status

- Excel Business School in 2007.
- Excel Polytechnic College in 2008.
- Excel College of Engineering and Technology and Excel College of Architecture and Planning in 2009.
- Excel College of Pharmacy, Excel College of Physiotherapy & Research Centre and Excel Institute of Health Sciences in 2017.
- Excel College for Commerce & Science and Excel Medical College for Naturopathy & Yoga in 2018.

Vision

To create competitive human resources in the fields of engineering for the benefit of society to meet global challenges

Mission

- To provide a conducive ambience for better learning and to bring creativity in the students
- To develop sustainable environment for innovative learning to serve the needy
- To meet global demands for excellence in technical education
- To train young minds with values, culture, integrity, innovation and leadership

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

The objective of carrying out SWOC analysis is primarily to understand the shortcomings of the institutions both quantitatively as well as qualitatively. This exercise also results in identification of appropriate areas of technology and thereby helps in developing industry ready employable graduates. The Principal, Director, the Heads of the Departments, the faculty, supporting and administrative staff and sample of students of all branches participated in SWOC analysis. The major inputs considered are

1. Teaching-learning
2. Research & extension activities
3. Students Progression
4. Infrastructure & Financial Support
5. Human Resources

Strength

- Recognition by UGC under sections 2(f) and 12(B)
- 4 UG programmes has got Accreditation by NBA
- Permanent Affiliation by Anna University (MECH, ECE, CSE & AERO)
- Recognized research centers by Anna University (MECH, ECE & CSE)
- Eco-friendly and conducive working atmosphere.
- Well maintained state-of-art building infrastructure and laboratory facilities.
- Prof. Dr. A. K. Natesan, Hon. Chairman of the institution, being an academician, educationist, philanthropist and as an Academic Council member in Anna University, Chennai gives much impetus for development of institution.
- The Institution with just eight years old has been awarded fastest growing institution by Brands Academy during the year 2011.
- Constant encouragement given to the faculty members in pursuing research leading to Ph.D.
- The institute is situated on National Highway 544 which is easily reachable and visible to travelers.
- Good sports facilities, infrastructure for hosting events of National Standards in sports and games.
- Students' association activities, mentoring, faculty appraisal, online students' feedback system.
- 30% of tuition fee is distributed as scholarships/ tuition fee waiver to financially weak and meritorious students. Merit based educational scholarship is being offered to all needy.
- Round the clock medical facility is provided to students with vehicle facilities.
- A Data Centre with high end blade server serves the students and faculty members with academic resources like NPTEL etc., by connecting about 617 systems in the campus with OFC network.
- Open or indoor Auditorium with a seating capacity of 2500

Institutional Weakness

- Majority of students are from rural areas with Tamil, Malayalam and Hindi as the medium of instruction in school level
- The scarcity of very well qualified senior professors especially for the core engineering due to rural area. However, the continuous effort is made by management team to recruit very senior level faculty from reputed institutions.
- As the Institution is situated in the rural area, where there is less number of industries and industry-institute interactions.
- Being a Self-Financing Institution, no funds from Government.

Institutional Opportunity

- An improved research environment can be foreseen as good number of faculty members pursuing Ph.D.
- Empowering all the faculty members by analyzing ways and means to undertake consultancy.
- Students project internship is encouraged in industries and national laboratories
- Students participation in club activities and intercollegiate competitions
- Preparing students for GATE, BEC and aptitude Examinations
- Scope of PG students to pursue Ph.D. under the supervision of the faculty members of the institute in association with the affiliated university
- Enough Areas are available to develop Technology Incubators and to initiate activities in association with EDDISSIA, Salem Productivity Council etc.,
- The introduction of curriculum beyond syllabus will help the students to improve their employability skills
- More opportunities to place the students in MSME Industries by Consistent contacts and MoU's with organization like ICTACT, etc.,

Institutional Challenge

- Training rural based Tamil medium students in English language and developing their communication skills is really a challenging job.
- Competition from autonomous Institutions functioning in the nearby areas.
- Starting of new engineering college in the vicinity is a growing competition.
- Bridging the fast changes in technology.
- Recruitment of qualified and experienced faculty members for rural area Institutions.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Institute follows the curriculum prescribed by the Anna University. The curriculum is well translated to the students after through preparation as well as critical thought by the teachers concerned.

- 21 faculty members are actively involved in academic committee of various bodies.
- Choice Based Credit System introduced in 6 UG programs and 6 PG programs from the academic year

2017-18. 709 new courses have been introduced in the past 5 years.

- The institution encourages the faculty to keep themselves update their knowledge by offering refresher courses, faculty development programmes and workshops. In addition, the institution has provided 87 value added courses and 63 certificate courses to students for developing skills to bridge the gaps in the syllabus.
- About 58.8% of students participated in certificate and add-on courses. Institution is sensitive to gender, environment issues, human values and professional ethics. Anna University has introduced courses on professional ethics, Human values and Environmental science.
- Departmental activities are scheduled which include Industrial visits, Implant training, Guest Lectures, Symposium, Seminars, Conference, Placement and Training and Association activities.
- About 19.74% of students have undertaken the field projects and internship every year.
- The IQAC academic coordinator monitors and assists the faculty members for effective curriculum delivery.

Department invites suggestion and feedback from students, teachers, employers, Alumni and parents regarding the curriculum and institution ensure its availability in the website.

Teaching-learning and Evaluation

- Average 80.88% of seats are filled as per the applicable reservation policy.
- More than 18.63% of students are from other states and countries.
- Institution conducts bridge program for the students after admission. Based on the marks obtained in the previous exams and participation in the learning process, the students are categorized into advanced and slow learners.
- As on date, no students from differently abled category registered in the Institution.
- At the beginning of each semester, the college level academic calendar will be developed with all essential details viz., reopening and closing dates, internal examinations dates, holidays, college level activities.
- The department prepares the academic calendar in align with the college calendar by including department specific activities and events. Each department distributes the calendar to all students and faculty members to plan their activities. The time table and the course plan are prepared well in advance.
- The faculty members are assigned courses based on their competency, subject expertise and experience.
- Each faculty member prepares the structured lesson plan, detailed course materials, question bank for theory subjects and lab manual for practical subjects as per guidelines given by IQAC.
- Faculty members incorporate the teaching pedagogy considering experiential learning, participative learning and problem solving methods in content delivery during their preparation.
- All the faculty members use ICT for effective teaching-learning process.
- Each faculty member is assigned with 15-20 students for mentoring.
- Institution has 29 faculty members with Ph.D degree.
- Class Committee meetings are conducted thrice during the semester. The chairperson of the committee communicate the rules and regulations of the department, examination procedure, discuss the syllabus completion and collect feedback on academic and administrative difficulties faced by the students. Based on the feedback, appropriate remedial measures are put into practice to improve the performance of the students. The major decisions/ improvements done based on the feedback received are communicated to the students.
- OBE is implemented in all programmes.

- The information on POs, PEOs and COs are communicated to the stakeholders. Student attainment of learning outcomes is measured by checking the level of CO and PO attainments for all the courses.

Research, Innovations and Extension

Institution has a dedicated team of researchers headed by a Director (R&D). A senior faculty member in each department has been nominated as research coordinator.

- Faculty members and undergraduate/postgraduate students are provided with adequate resources to pursue research in their respective field of interest. Students are encouraged to take up research project under the supervision of the faculty members.
- 59 workshops/ seminars are conducted on IPR & Industrial linkages.
- During science expo, students are displaying their gadgets to encourage young minds who visit the expo.
- The Institution has 29 Ph.Ds holders, 34 pursuing Ph.D. and remaining faculty members are working collaboratively.
- The faculty members pursuing research are encouraged by providing them the required equipments, books, leaves for research work, financial assistance for conferences/journals, e-resources, computer facilities, Wi-Fi etc.
- The college provides incentives to the faculty for their research contribution. Research meeting is conveyed to discuss proposals to funding agencies.
- The departments of CSE, ECE and Mechanical Engineering are recognized as "**Research Centers**" by the Anna University.
- 11 faculty members are recognized supervisors of Anna University and other Ph.D holders are motivated to obtain supervisor recognition.
- The faculty members who do not possess Ph.D degree are advised to register for research work.
- The institution has a well defined code of ethics to check malpractices and plagiarism in research. Institution honors the teachers who receive recognition and awards.
- 33 research papers have been published in the UGC recognized journals.
- 120 papers have been presented in national/international conferences.
- 31 books have been published by faculty members.
- Institution has an Industry Institute Partnership Cell (IIPC) which has signed 38 MoUs with Industries to carry out collaborative work in project development and consultancy.
- 305 industrial linkage program such as internship, field trip, on-job training and research have been organized.
- Faculty members and students are actively involved in 59 Institutional Social Responsibility activities through structured forums like NSS, YRC, Rotract and Clubs and Societies.

Many recognition and awards are received for various extension activities from University, State level agencies and NGOs.

Infrastructure and Learning Resources

The state-of-art infrastructure augments learning environment is the significant concern of the institution. Our Management is generous in enhancing the infrastructure as and when needed which promotes a good teaching-learning environment.

- Institution has spent an average of 13.56 lakh on infrastructure and resources.
- Institution has 41 classrooms/ smart classes/ seminar halls with ICT facilities.
- Management spends average of 112.69 lakh on infrastructure augmentation excluding salary.
- The college has provided with more than 617 computers with LAN and UPS facilities and 20 air-conditioned laboratories.
- The computer centers are equipped with high-end computers, accessories such as Laser, Inkjet and Dot matrix printers, scanners, LCD and OHP projectors.
- The college has in-house Computer Maintenance Cell (CMC). Adequate financial allocations are made for internal maintenance work of all infrastructures.
- As an average of, approximately 210.96 Lakhs is spent for maintenance of college Infrastructure.
- The campus is fully enabled with Wi-Fi in the speed of 30 Mbps. The college has licensed and open source software in various departments.
- As per AICTE norms, 544 system and 27 printers are needed but college is equipped with 617 systems and 39 printers.
- Computer and student ratio 1:5.2. In every department, ICT enabled classrooms are available with internet connectivity for supporting the teaching-learning process.
- The college has 39 LCD Projectors and 2 OHP to enhance the teaching and learning. CCTV cameras are installed in the college premises to monitor the campus activity and maintain security.
- Six smart classrooms with interactive boards are available interactive teaching-learning process.
- The central library is automated with DelNet (a ILMS). The library is enriched with rare books, project reports, reference/ text books, e-resources, e-journal, Wi-Fi and CCTV for security.
- Library could accommodate 300 students. 23.57% of teachers and students are using library on daily basis.
- The library has 26 computers with internet facilities and 2 printers.
- The college main library has 41046 books and 1058 journals.
- Separate gyms for boys and girls are provided in the hostels.
- Institution has basket ball court, kho-kho, shuttle court, cricket pitch, kabbaddi court etc.

Institution has in-house sport facilities like carrum, chess, table-tennis etc. are available.

Student Support and Progression

- Institution has 2467 students from diverse background.
- To meet the needs of the students, student support service of our college is administered through a faculty advisory system.
- Department has faculty advisor system where 15-20 students are allocated to each faculty member for counseling and to improve the academic performance of the students.
- The Institution offers scholarship and financial assistance to academically strong and economically weak Students.
- On an average of 57.37% of students are benefited by scholarships and freeships provided by the government.
- 29.94% of students are benefited by the scholarship/concession provided by the institution besides government schemes during 5 years.
- The Training and Placement Cell of the college extends its service in the form of career guidance, resume building, soft skill training, technical training etc.
- It also supports campus recruitment in the form of pre-placement talk.
- 2013 students are benefited from the training in the year 2017-18.

- 52.97% of students benefited from the training over 5 years.
- 16.85% of students are benefited by vocational and training over the 5 years. Competitive exams are encouraged in the campus.
- Library has materials for students who prepares for the competitive exams.
- Departments encourage students to participate in State, National and International level of curricular and co-curricular events.
- The NSS, YRC, RRC and LEO club of our institution motivate the students and staff to participate in the extension activities such as awareness rallies for Blood donation, Health camp and orphanage visits.
- 128 cultural activities and sports competitions organized in the campus during the last 5 years.
- Entrepreneurship Development Cell has been established through AICTE funding of Rs.1,00,000/- to bring out the entrepreneurship spirit among the students.
- Institution has a well defined redressal cell for addressing anti-ragging and sexual harassment. Anti-ragging and sexual harassment committees are established in the campus.
- Institution has an exclusive placement division under the headship of a director.
- 75 IT based and 17 core companies have recruited the students. Highest salary offered during this year is 5 Lakhs per annum.

Institution has alumni association meeting every year. All the passed-out students are members of the alumni association.

Governance, Leadership and Management

The institution has an effective and transparent governing system in tune with the vision and mission of the Institution.

- The organization structure of the institution and decentralization is clearly defined in the campus.
- The Governing Council Committee conducts periodical meetings where analysis the progress of the institution and recommends the improvements.
- The Management has constant touch with the Principal to maintain cordial rapport to discuss the infrastructural needs, development, administration and appointments.
- Management participates in the college functions viz., Graduation Day, College Day, Sports Day, Conferences etc.
- The Principal is the Academic and Administrative head of the college and responsible for the implementation the Vision and Mission of the college.
- Institution/ departments have a clear perspective/ strategic plan and it is deployed effectively.
- Each functional body is clearly defined with service rules and procedures.
- Institution has well defined procedures for recruitment and promotion.
- Institution has implemented e-governance in the all the areas of administration.
- Various bodies/ cells/ committees are working effectively and regular meetings are called for the discussion and recorded.
- HODs organize Career Guidance Programmes, Workshops, Value added course, symposium, social relevance activities, Seminars and Conferences to enrich the knowledge and showcase the talents of students.
- 33.55% of teachers benefited with financial support for attend conferences/ workshops and towards membership fee of professional bodies during the last 5 years.
- 40 professional development/ administrative training programs organized in the campus for benefits of teaching and non-teaching staff during the last 5 years.

- 67.42% of teachers benefited from attending professional development programs. Institution has implemented various welfare measures for teaching and non-teaching staff to keep them comfortable.
- The Institution follows rigorous Quality Assurance processes that pave the way for ensuring academic excellence.
- The IQAC is responsible for the effective implementation of the Quality processes.
- IQAC is conducting quarterly meeting
- IQAC has submitted the AQAR to the NAAC.
- IQAC conducts the Academic and Administrative Audit and based on the observation of the report, quality recommendation are given.

Institutional Values and Best Practices

- To create awareness of gender equality, 19 gender sensitization and awareness programmers are conducted for the last 5 years.
- The institution has undertaken numerous safety and security measures in the campus.
- The Institution is under CCTV surveillance to ensure safety and security of the students.
- Department has faculty advisor system where 15-20 students are allocated to each faculty member for counseling and to improve the academic performance of the students.
- 33.48% of annual power requirement of the institution met by renewable energy sources like solar panels, LED lamps etc.
- 40.47% of annual lighting power requirement is met through LED bulbs.
- Institution has facilitated with solid, Liquid and e-waste management system to keep the campus green and hygienic.
- Rain water harvesting systems prevail in the campus. The institution is landscaped with trees and plants.
- For carbon neutrality, vehicle pooling is practiced. 95% of day-scholars are travelled by college buses.
- Paperless office and Plastic free campus is in practice.
- Institution has facilitated the differently abled students with ramps, lists, rest-rooms, scribes for examination etc.
- The institution has location dis-advantages viz., located in the rural part of Tamilnadu.
- The students who join the Institution are maximum from Tamil medium and parents' awareness on engineering programmes is less.
- Institution is located outside the industrial corridor.
- Institution has taken up 16 initiatives to the local community.
- Institution has a handbooks which contains the code of conduct for students, staff, teachers, Principal, governing body etc. These details are displayed in the website.
- Institution celebrates the national and religious festivals encourage national integration and communal harmony respectively.
- Birth anniversaries of great Indian personalities are being celebrated in campus.
- Remembering the great Indian personalities on their death anniversary is practiced. Every year, 5 such programmes have been conducted in the campus.
- Programs have been conducted to give awareness on fundamental duties and rights of Indian citizens.
- Human values and profession ethics are being taught to students as a courses as per Anna University curriculum.
- OBE in Teaching-Learning Process and Industry-Institute Relation towards Skill Development are two best practices practiced in the campus.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	EXCEL ENGINEERING COLLEGE
Address	NH-544, SALEM MAIN ROAD, PALLAKAPALAYAM, KOMARAPALAYAM, NAMAKKAL DT -637303.
City	Namakkal
State	Tamil Nadu
Pin	637303
Website	www.excelinstitutions.com/excel_engg/index.aspx

Contacts for Communication					
Designation	**Name**	**Telephone with STD Code**	**Mobile**	**Fax**	**Email**
Principal	S. POORNA CHANDRA	04288-227361	9965641888	04288-227368	principaleec@excelcolleges.com
IQAC Coordinator	G.Prakash	04288-227362	9842996917	-	chiefiqac@excelcolleges.com

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	18-07-2007

University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	**University name**	**Document**
Tamil Nadu	Anna University	[View Document](#)

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC	01-05-2012	[View Document](#)
12B of UGC	13-08-2018	[View Document](#)

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	**Recognition/Approval details Institution/Department programme**	**Day,Month and year(dd-mm-yyyy)**	**Validity in months**	**Remarks**
AICTE	[View Document](#)	19-07-2018	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes [autonomydoc_1542694300.pdf](#)
If yes, has the College applied for availing the autonomous status?	Yes

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	NH-544, SALEM MAIN ROAD, PALLAKAPALAYAM, KOMARAPALAYAM, NAMAKKAL DT -637303.	Rural	10.21	25861.66

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	HSC	English	120	56
UG	BE,Civil Engineering	48	HSC	English	120	56
UG	BTech,Information Technology	48	HSC	English	60	50
UG	BE,Agriculture Engineering	48	HSC	English	60	0
UG	BE,Biomedical Engineering	48	HSC	English	60	0
UG	BTech,Food Technology	48	HSC	English	60	0
UG	BE,Aeronautical Engineering	48	HSC	English	120	120
UG	BE,Computer Science And Engineering	48	HSC	English	120	115
UG	BE,Electronics And Com	48	HSC	English	120	107

	munication Engineering					
UG	BE,Mechanical Engineering	48	HSC	English	120	97
PG	ME,Aeronautical Engineering	24	B.E	English	18	11
PG	ME,Applied Electronics	24	B.E	English	18	8
PG	ME,Environmental Engineering	24	B.E	English	24	18
PG	ME,Structural Engineering	24	B.E	English	24	21
PG	ME,Thermal Engineering	24	B.E	English	24	17
PG	ME,Computer Science And Engineering	24	B.E	English	24	8
Doctoral (Ph.D)	PhD or DPhil,Computer Science And Engineering	24	B.E	English	10	3
Doctoral (Ph.D)	PhD or DPhil,Electronics And Communication Engineering	24	B.E	English	10	8
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	24	B.E	English	10	10

Position Details of Faculty & Staff in the College

Teaching Faculty											
	Professor				**Associate Professor**				**Assistant Professor**			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				16				21				156
Recruited	16	0	0	16	16	5	0	21	111	45	0	156
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				133
Recruited	125	8	0	133
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	46	20	0	66
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	16	0	0	10	4	0	1	0	0	31
M.Phil.	1	0	0	20	19	0	0	0	0	40
PG	0	0	0	5	1	0	90	26	0	122

Temporary Teachers									
Highest Qualification	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers									
Highest Qualification	Professor			Associate Professor			Assistant Professor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
	6	0	0	6

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Doctoral (Ph.D)	Male	17	0	0	0	17
	Female	4	0	0	0	4
	Others	0	0	0	0	0
Certificate	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
UG	Male	314	87	0	53	454
	Female	159	7	0	2	168
	Others	0	0	0	0	0
PG	Male	39	13	0	2	54
	Female	10	4	0	0	14
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	152	175	115	173
	Female	98	95	47	75
	Others	0	0	0	0
ST	Male	4	9	2	3
	Female	6	2	0	4
	Others	0	0	0	0
OBC	Male	213	257	216	264
	Female	120	115	82	121
	Others	0	0	0	0
General	Male	99	108	119	128
	Female	32	23	30	28
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		724	784	611	796

3. Extended Profile

3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response: 980

File Description	Document
Institutional Data in Prescribed Format	[View Document]

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
12	12	12	12	10

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2467	2331	2110	1983	1642

File Description	Document
Institutional Data in Prescribed Format	[View Document]

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
644	644	644	693	560

File Description	Document
Institutional data in prescribed format	[View Document]

Number of outgoing / final year students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
689	504	491	410	368

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

Number of full time teachers year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
222	212	209	172	147

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of sanctioned posts year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
222	212	200	170	138

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 67

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
303.04	338.64	376.67	359.29	229.79

Number of computers

Response: 617

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

Excel Engineering College is affiliated to Anna University, Chennai and all the UG, PG and PhD programs are followed with the curriculum and syllabi framed by the University.

Academic Calendar

- Institution calendar is prepared at the beginning of each semester including working days, government and local holidays, and schedule of internal assessment and university examinations.
- Department calendar is prepared in aligned with the Institution calendar and it includes department activities such as guest lectures, seminars, workshops, symposiums, conferences, activities of various clubs, industrial visit/training, value added courses etc.

Quality of Classroom teaching

Quality of the class room teaching depends on content delivery, interaction, discussion, examples, applications and usage of modern ICT tools. The role of the teachers is significant not only with contents but also with inspirational engagement of the students through various instructional methods and pedagogical initiatives.

Instructional methods and pedagogical initiatives

Institution practices outcome based education (OBE) while planning and delivering the content. The faculty members will prepare the course plan based on the academic calendar to complete the syllabus as per the frame work.

- Various Innovative Teaching & Learning methodologies are adopted by the faculty members to create the best learning environment for students. Teaching and Learning methodologies include traditional (Chalk and talk) and technology enabled methods.
- Video lecturing is provided by faculty members to explain the real world problem with industrial illustrations, design issues etc.
- Faculty members prepare the e-materials for the benefits of students by posting in DSPACE and online forums.
- Faculty demonstrates static & working models, simulations, animations and implemented projects in the department.
- Invited expert lectures (industrialists/academicians) are arranged to deliver the content beyond syllabus for knowledge enhancement and value added courses have been organized for bridging the gap between Industry and Academia.
- Tutorials/ E-learning classes are practiced for participative learning with peer group concept.

Assignments are given to improve the knowledge beyond the syllabus. Group Discussions and brain storming are encouraged for participative learning

- ICTACT collaborative learning methods are encouraged to both students and faculty members to enrich knowledge and certification in the cutting edge technologies.
- Laboratory practices are mandatory to have hands-on experience.
- Motivating students for doing research work and present papers in seminars/conferences/journals.
- Well stocked library with reference books and magazine for the knowledge enhancement.

Monitoring system for curricular delivery

- HODs and, Academic and Teaching coordinators are regularly monitoring the delivery of curriculum. Formal and informal feedbacks have been taken from the students in a regular interval to monitor course delivery and syllabus completion.
- Entrusting the teaching faculty with the task of mentoring 15-20 students on academic and personal issues.
- Class committee meeting is arranged where students' representatives can express their difficulties in the academic and administrative issues.
- Adopting OBE for the effective delivery of the curriculum, Question papers for the IAs are designed to assess the attainments of the COs.
- Department level IQAC regularly monitors the quality in curricular delivery.

File Description	Document
Any additional information	[View Document]
Link for Additional Information	[View Document]

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 63

1.1.2.1 **Number of certificate/diploma programs introduced year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
18	12	12	9	12

File Description	Document
Minutes of relevant Academic Council/BOS meetings	[View Document]
Details of the certificate/Diploma programs	[View Document]
Any additional information	[View Document]

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 32.74

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
21	15	12	9	6

File Description	Document
Details of participation of teachers in various bodies	[View Document](#)
Any additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 72.35

1.2.1.1 How many new courses are introduced within the last five years

Response: 709

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	[View Document](#)
Details of the new courses introduced	[View Document](#)
Any additional information	[View Document](#)

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

Response: 12

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Any additional information	View Document

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

Response: 58.8

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1641	1486	1178	1015	931

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

As an affiliated college of Anna University, Chennai, efforts are made by the institution to focus on the gender equality, climate change, environmental & sustainability, human values and professional ethics.

Gender Equality

The institution has formed a "Women Grievance Redressal Committee" with one of the senior woman faculty members as convener and other women faculties as members. This committee provides an exclusive platform for women employees and girl students to discuss their grievances in a common forum. It develops welfare schemes for them and establishes self-esteem and respect for women without any gender bias. It organizes special programs to empower them with their basic rights. Institution has invited

lady police officers, doctors, lawyers and socialists to deliver special lectures with interactive sessions on gender equality.

Environment & Sustainability

The institution being a green campus, is improving energy efficiency by conserving the natural resources for creating healthy living and learning environment. The institution has been constructed amidst the lush green trees. The institution has taken the efforts to give awareness on environmental issues and its sustainability to society through extension activities by NSS and Rotract club.

The Institution has implemented rain water harvesting system to recharge ground water by collecting the rain water from the catchment areas from roof top of buildings through organized trench and storing in reservoir (Pond) which is used for gardening and construction works.

Sewage water has been treated and reused for landscaping and agricuture. Solid waste is also treated and used as manure for agriculture land after producing the gas through gassifier.

Vehicle pooling concept is in place for carbon neutrality. More than 90% of day scholar students and faculty members are using college buses for travel. All the branches of engineering have a subject focuses on the Environmental issues and sustainability in their curriculum.

Human Rights

The College has formed an Anti-Ragging committee with the Principal as the convener. This committee effectively controls ragging, which is a violation of fundamental human values and rights. At the beginning of every year, this committee forms an Anti-Ragging Squad for the control of ragging. The squad members are posted at the crowded areas of the college campus to prevent the fresher from being ragged. Many hostel committees are formed to educate the students by peer group and avoid ragging menace. These activities control the unpleasant incidents arising from ragging and because of this the college campus is declared as a Ragging-Free Campus.

Professional Ethics

Professional ethics encompass the personal and corporate standards of behavior expected by professionals. Anna University curriculum has "Professional Ethics" as subject to all the branches of Engineering. The students are trained to use the professional knowledge to face the public. Students are capable of making judgments, applying their skills, and reaching informed decisions in situations that the general public cannot do because they have not attained the necessary knowledge and skills. The college training division also trains the students on these soft skills.

File Description	Document
Any Additional Information	View Document
Link for Additional Information	View Document

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 86

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 86

File Description	Document
Details of the value-added courses imparting transferable and life skills	[View Document](#)
Brochure or any other document relating to value added courses.	[View Document](#)
Any additional information	[View Document](#)

1.3.3 Percentage of students undertaking field projects / internships

Response: 19.74

1.3.3.1 Number of students undertaking field projects or internships

Response: 487

File Description	Document
List of students enrolled	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise
A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

File Description	Document
Any additional information	[View Document](#)
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	[View Document](#)
URL for stakeholder feedback report	[View Document](#)

1.4.2 Feedback processes of the institution may be classified as follows:
A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Any additional information	[View Document](#)
URL for feedback report	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 18.63

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
456	411	406	374	311

File Description	Document
List of students (other states and countries)	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 76.11

2.1.2.1 Number of students admitted year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
672	704	523	692	482

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
792	852	852	852	684

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 80.88

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
506	546	462	568	489

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The institution organizes special programs for advanced and slow learners after their admission to enhance their communication skill, imagination skill, arithmetic skill, leadership skill, inter & intra personal skill etc. The special programs are conducted for slow and advanced learners namely,

- Engineers like qualities
- Group planning
- Situation reaction and priority
- Brain training for slow learners
- Freshers motivation program
- Restoration and development of self-confidence
- Development of good working habits
- Healthy environment
- Elastic curriculum

Assessment of slow and advanced learners

Slow and advanced learners are assessed based on the following rubrics

- X and XII/ diploma marks
- Languages known
- Communication skill

- Drafting skill
- Remembering skill
- Imagination skill
- Arithmetic skill
- Leadership skill
- Intra & inter personal skill
- Body language
- Impact on sensitized students

The institute assesses the students based on their academic performance during their admission. After the students joined in the institution, the student performances are analyzed based on their academic participation and performance in classes, laboratories and, co-curricular and extra -curricular activities.

Student assessment in first year of UG/ Lateral entry:

Student's assessment after the admission in first year is based on their performance in secondary school education, the stream they studied and their medium of study. Based on their score and stream, the student academic gap is identified and bridge courses are conducted for English, Mathematics, Physics and Chemistry. The courses are taken for maximum of fifteen days. Pre-assessment and post-assessment are conducted to know the improvement in the bridge courses.

Lateral entry students are assessed based on their performance in diploma course. Based on their score, academic gap is identified and bridge courses are conducted for Mathematics and fundamentals of courses chosen in their respective program.

Student assessment for senior classes:

The students of higher semesters are divided into slow and advanced learners based on their performance in internal assessment examination and participation in academic and non-academic activities. After the first assessment, slow learners are identified and special/ evening classes are conducted.

The advanced learners are encouraged to participate in various National and International level events. They are guided to take part in developing innovative projects through Technology Business Incubator (TBI), Entrepreneurship Development Cell (EDC) and Institution Innovation Council (IIC) and participating in Seminars, Workshops and Industrial trainings. Also, they are further motivated to publish their project work in Conferences, Journals and Project Expos. Advanced learners are identified as peer leaders to help the slow learners.

The institution has a well-defined Mentoring System. Mentors are allocated with 15–20 students in a group. Each mentor counsels their mentee on regular basis and monitors academic performance. One hour per week is allotted exclusively in time table for mentoring. Apart from that, students can meet their mentor as and when they need guidance. They also motivate them to take part in the academic activities to improve the performance.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.2.2 Student - Full time teacher ratio

Response: 11.11

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0

2.2.3.1 Number of differently abled students on rolls

File Description	Document
Institutional data in prescribed format	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The teaching learning process of Excel Engineering College is student centric and the students are provided with various learning facilities inside the campus. The teaching-learning process is provided with proper plan of execution to facilitate the learner.

Experiential learning

Experiential learning9 is the process of learning through experience. It is more specifically defined as learning through reflection on doing or hands-on learning.

- Faculty members are using demonstration model during their course delivery to explain the complicated system by which students can experience the working concept of the system.
- Institution encourages the final year students to take up the projects from Industries so that they could understand the industrial scenario.
- Students are taken to the industries to explain the concept in a real time environment. Institution encourages the students to undergo industrial training and internship to learn through experience.
- State-of-the-art laboratories are available in the institution through which students could understand the theoretical doubts.

- Four departments have been recognized as research centers of Anna University. Students are given access to make use of the research facilities for their experiments behind their innovative ideas.
- Hyundai Professional Centre (HPDC) is also one of the excellent facility (established as the first in South India) available inside the campus to provide high-tech skill development to the students.

Participative learning

The Institution practices the participative learning concept in the teaching-learning process to enhance the transfer of knowledge by the participation of students.

Institution practices the following techniques:

- Peer group is formed to take up seminar, case study and assignment.
- **Role Play/Quiz/Brainstorming/Gaming** is practiced for students to understand and implement the concept.
- **Mini-Projects/Projects** always make the students to participate in understanding the basic and design concepts of the course.
- **Seminars/ Workshop/Conference**
  - Students are encouraged to participate in Workshop, Seminars, design and coding contests, and Ideathon and Hackathon events.
  - Innovative ideas of the students are presented in the conference and published in the journal.
- Students participate in the interview process for their employment. They have been trained to acquire the knowledge and skills demanded by the industries.
- **Participation in the activity**
  - Students are encouraged to participate in any of the club of excellence-Music Club, Dance Club, Maths Club, NSS, YRC, Rotaract Club, Environment Club, Innovation Club, Science Club etc., apart from the department level technical clubs/associations.

Problem solving methodologies

Problem solving methodology is a student-centered pedagogy in which students learn through the experience of solving open ended problems. This process allows the students to develop other desirable skills and attributes such as knowledge acquisition, enhanced group collaboration and communication. It enhances critical appraisal and literature retrieval, and encourages ongoing learning within a team environment.

Peer group is formed in each department. Tutorials are being conducted where each student participates in the problem solving. Students are given seminars and case studies to solve the real time problems. Assignments are given to search the material and solve the open end problem.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 98.2

2.3.2.1 Number of teachers using ICT

Response: 218

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 14.95

2.3.3.1 Number of mentors

Response: 165

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

The institution adheres to innovative teaching-learning practices to bring academic excellence. The teacher uses various tools for enhancing the innovativeness and creativity in teaching.

- Faculty members use Power Point presentation, NPTEL videos and video lectures (using animations) to create and instill innovation creativity in the teaching- learning process.
- The interactive sessions/ lectures are provided to the students through smart board teaching and collaborative teaching-learning via ICTACT, IIT Workshops/ Seminars and webinars.
- Apart from the conventional teaching approaches, E-learning classes, brain storming sessions etc., are adopted.
- The working models and charts are used by the faculty members to explain the fundamental and featured topics with advanced technologies in Theory and Laboratory classes.
- Guest lectures, field trips, visit to the industries, tutorial classes are practiced
- Peer group is practiced for the better participation in the group discussions, assignments, and practical sessions.
- Students are given with seminar, case study and mini projects through peer groups in order to bring

additional focus on the co-curricular activities.

- Laboratories and seminar halls are provided with internet and Wi-Fi connections to give extensive use of ICT tools for students to strengthen their technical skills.
- Simulation tools are used in the laboratory classes in order to make the student to participate in the learning practice and to enhance the problem-solving skills.
- Each department has registered with at least one professional society through which the technical experts are invited for guest lectures, seminars and workshops.
- Students are encouraged to organize and attend the programs in departments under the students association banner
- The students are motivated to submit their creative and innovative project proposals to various funding agencies like TNSCST, FAER, DST, ICAR, ICMR and others. Few of the projects have got fund from TNSCST.
- The institute has MOUs with various industries to make the students get interacted with the industrialists. They are also encouraged to take industrial visits, in-plant training, training programs, projects and internship.
- IPR cell is functioning in the institution and the students are given awareness about how to develop their innovative ideas into patentable projects. Few students have registered their innovative work as patent.
- Every year, the institute conducts a science and technical exhibition in the name of "**Excel Science & Tech Expo**" and the students from all streams prepare innovative projects and exhibit during the event. The juries scrutinize and best projects are awarded.

Various clubs are functioning inside the campus. Many competitions and cultural programmes are conducted through the clubs where the students can bring out their creativity and hidden talents. Few of the clubs of excellence are;

- Music club
- Dance club
- Mathematics club
- Science club
- Tamil Mandram
- Drama club

Here students have demonstrated their novel ideas in the cultural performance. Many of students have won prizes at the collegiate functions at district level also.

File Description	Document
Any additional information	[View Document](#)

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 102.44

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	<u>View Document</u>
List of the faculty members authenticated by the Head of HEI	<u>View Document</u>
Any additional information	<u>View Document</u>

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 7.86

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
26	18	15	10	9

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	<u>View Document</u>
Any additional information	<u>View Document</u>

2.4.3 Teaching experience per full time teacher in number of years

Response: 7.38

2.4.3.1 Total experience of full-time teachers

Response: 1637.66

File Description	Document
Any additional information	<u>View Document</u>

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 2.08

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
3	0	1	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copies of award letters (scanned or soft copy)	<u>View Document</u>
Any additional information	<u>View Document</u>

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 1.21

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
3	3	3	3	0

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	<u>View Document</u>
Any additional information	<u>View Document</u>

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

The Institution has the following reforms in Continuous Internal Evaluation to make the assessment system more transparent:

- The institution follows the evaluation procedure prescribed by the affiliating University. The evaluation weightage is 20% for Internal Assessment Examinations and 80% for the End-Semester Examinations both theory and practical subjects
- The academic calendar is prepared at the beginning of each academic semester where internal assessment, practical and theory examination are scheduled.
- The question paper pattern for internal assessment examination (IAE) is similar to the University

question paper. This will ease the students while taking university exam. Questions are prepared aligned with Course Outcomes (COs) and knowledge levels of Blooms Taxonomy.

- Two sets of question papers are prepared by the faculty members and expected to submit at least one week before the commence of the exam.
- Each department has scrutiny committee which thoroughly check the two sets of question papers and approves. Among the two question paper, one will be selected by the committee. Scrutiny committee also ensure the usage of appropriate blooms taxonomy and contents to ensure that none of the questions are asked beyond the syllabus defined for each internal exam
- The syllabus for the each internal exam recommended as follows; IAE-1 covers 100% of Unit-1 and 50% if Unit-2, IAE-2 covers remaining 50% of Unit-2 & 100% of Unit-3 and IAE-3 covers Unit-4 & 5 and latest recommendation is as follow; IAE-1 covers Unit-1, IAE-2 covers Unit-2 & 3 and IAE-3 covers Unit-4 & 5
- A squad constituted by exam cell monitors the conduct of internal assessment examinations. Malpractice during the exam will be referred to the disciplinary committee. At the end of the exams, such students are called along with the parents and conduct the enquiry.
- Retest is conducted if the students fail to attend the internal assessment examinations for valid reasons and improvement test is conducted for those who aspire for upgrading their performance. The second set of question paper will be used for conducting the improvement test.
- Answer papers are discussed in the presence of students and students have been informed the mistakes committed in the answer paper and any mistakes in the marks will be suitably addressed.
- Each department will conduct the analysis meeting where result will be analyzed at microlevel. The common point on which the result will be discussed as follows:
  - Comparing with previous year result
  - Subject wise analysis
  - Faculty wise analysis
  - Girls and boys
  - Dayscholars and Hostellers
  - Scholarship and non-scholarship students
  - Analysis of students coming from Tamil media and English media
  - Students ranking
- Based on the analysis, HODs and senior members of the department will finalize the suitable recommendation so as to improve the students performance in the later internal exams.
- Performance is informed to the students and parents immediately after the assessments.
- Both IAE marks and attendance are uploaded periodically in the Anna University web portal.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

Institution has a transparent and robust mechanism for the conduct of internal assessment examinations.

The institute is affiliated to Anna University and follows the guidelines of the university in conducting the internal assessment examinations. The academic calendar is provided to the students at the beginning of the semester with the details of assessment examinations of the respective semester.

- Each internal examination will be conducted after 22 – 25 working days. The fixation of internal exam is aligned with the web portal entry schedule given by the Anna University to upload the internal marks of each internal exam
- During each semester the students are well informed about the examination schedules through circulars and information in the notice boards.
- Attendance is maintained during the assessment period by the department examination cell. Absence is informed to the parents and reasons are recorded in the students' database.
- Valuation of answer scripts is completed within three days after the examination and the consolidated statement of marks and attendance are uploaded in the Anna University web portal as per the schedule. The same can be viewed by the students through their login in the portal.
- Parents are informed about their ward's performance through letters at the end of each internal assessment examination. If the performance of a student is poor in all the subjects, parents are called by the faculty advisor to discuss the problem.
- During counseling time, faculty advisor will discuss with the students to identify the personal or subject problems.
- Class committee meeting is conducted at regular intervals to know the feedback and grievance from the students about the examination schedule, syllabus coverage and availability of study materials.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

- The institution has a transparent mechanism to address the grievance related to examination. After the internal examination, chairman of the class committee call for the meeting where student could express their general difficulties faced during the examination. Chairman of the class committee will discuss the difficulty related to the exam with the exam cell in the presence of the HOD for proper solution.

- Students can express their exam related grievances during the Class Committee meeting. Students are permitted to express their difficulty for the preparation of internal assessment by requesting special classes, tutorial classes and contact classes etc. Based on the feedback, the chairperson of the committee in consultation of the subject teachers will address the problems of the students.
- Once the answer paper is evaluated, the subject teacher distributes the answer script in the class rooms to discuss the discrepancy in the evaluation within 3 days from the completion of the exam. Students could discuss with the subject teacher if they have any discrepancy in the award of marks.

- Students can approach the HOD for re-exam if they have a valid reason through their faculty advisor.
- Student can represent the difficulty to the Principal if it is not be resolved at the department level.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

Yes. Institution adheres to the academic calendar for the conduction of continuous internal examination.

The academic calendar of the Institution is prepared by the Principal in consultation with HODs before commencement of every semester and consists of;

- Holidays
- Schedule for internal exams
- Last working day
- Date of practical University examination
- Institutional level functions viz college day, sports day etc.

Based on the Institution academic calendar, department academic calendar is prepared by the HOD in consultation with faculty members. The department academic calendar is consists of

- Schedule of internal exams
- Seminars/ workshops
- Value added courses
- Conferences
- Revision

The academic calendar is displayed on departmental notice boards. Based on the academic calendar each faculty member prepares teaching plan for theory and lab subjects. Subject loads are allocated to faculty members well before advance so that they could make the plans. The teaching plan includes:

- Study material including question bank for students
- Syllabus and deliver plan
- Teaching pedagogy to be used for each content delivery
- Assignments to be given
- Slow learners classes

Plan of Continuous Internal Exam

Each continuous internal exam is well planned by the exam cell of each department governed by the exam cell of the institution.

- 3 number of internal exams are conducted per semester
- Syllabus for each internal exam is clearly defined at the beginning of the semester
- 3rd day from the subject exam, the answer papers are given to the students and any changes will be addressed.
- The internal marks are entered in the Anna University web portal as declared by the university.
- Internal marks are displayed in the notice board for the benefit of students.

Following preparation are carried by the exam cell for the conduction of internal exam

- Exam coordinator of the department collects the stationary from the store based on the number of students and subjects.
- Hall plan is displayed by the exam coordinator
- Hall invigilators list is prepared
- Students and faculty members are given appropriate instruction on the conduction procedure, do's and don'ts
- Two sets of internal examination question papers are collected from the subject teacher
- Exam cell will take decision to give one set of question paper to the students
- Hall invigilator collects the answer script from the department exam cell and returns upon the completion of each exam.
- Exam cell collect the internal exam marks and prepare the result analysis presentation where HOD in the presence of faculty members, analyse the salient features. Based on the analysis report, remedial is decided to improve the result of the department.
- Only on extreme condition, the internal exam or a particular subject exam might be postponed.
- Each faculty will map the questions and marks obtain on CO to calculate the CO attainment.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

The institute have well defined Programme outcomes, Programme specific outcomes and Course outcomes for all Programme offered by the institution and it is displayed on website for teachers and students communication.

Process of Communication of POs, PSOs and COs:

1) The defined POs, PSOs and COs are displayed in the website for respective programmes (**www.excelinstitutions.com/excel_engg)**

2) Display boards in HODs cabin, faculty room, class rooms, seminar halls and laboratories.

3) Displayed at notice boards.

4) Available in documents like

- Brochures, Newsletters and magazines
- Parent communication letter
- Lab manuals and records
- Faculty individual log book
- Course file of faculty

5) It is discussed with the students and faculty members through the following ways, Class Committee Meeting

- HODs Meeting
- PAC Meeting
- DAAC Meeting
- Parents Meeting

File Description	Document
COs for all courses (exemplars from Glossary)	[View Document](#)
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

OBE is practiced in each department to understand the attainment of each course delivery from the following.

PEOs describe the career and professional accomplishments of a graduate and realized through surveys after 4-5 years of student employment.

POs and PSOs are to be aligned with PEOs and graduate attributes. PSOs are specific to each program. Both are related to Knowledge, Skill and Attitude of graduates as they progress through their graduation.

COs are more specific statements to a particular course in the program to be attained at the end of each course.

Direct method is measurable student performance indicators based on examination, tutorial, assignment, laboratory, seminar etc.

Indirect method is measurable student performance indicators based on student exit survey, alumni survey, employer survey, parents survey, students feedback, and Course End Survey.

The internal exam questions must be mapped to their CO's. RUBRICS helps us to define the threshold through which level of attainment of a CO's are calculated.

The threshold value is the minimum pass percentage for each CO in a subject. Level of CO attainment is based on the percentage of students above the threshold percentage.

For example: To calculate the level of CO1 for Test 1, first the marks scored by 4 students are listed CO-wise and their max mark is specified. Since 50 is the pass percentage threshold and rubrics are set for 50%, by calculating number of students above threshold (only 2 out of 4 which is 50%) the level is defined as 1(low) as specified in the rubrics.

The level of CO of each test are listed in the below format.

Internal exam and assessments						
C101	IA-1	IA-2	IA-3	Internal	Sum of Internal	University
CO1	1	-	3	3	2.33	3
CO2	3		3	3	3	3
CO3		3	3	3	3	3
CO4		3	3	3	3	3
CO5		3	3	3	3	3
Internal/ University attainments					2.87	3
Weightage					20%	80%
Co-attainment for the subject					0.25	2.40
Final co-attainment for the subject					2.97	

To measure PO in direct method a CO/PO matrix is used. Lecturers of each course map their CO to the appropriate PO to ensure all PO are delivered throughout the study.

The weightage scale uses the scale 1-3: 1=Low; 2=Medium; 3=High

PO attainment = Average of CO's of a PO /3 X Final CO attainment for the subject

For indirect method,the questions in the survey sheet should represent the PO's and needs to be a defined based on the Rubrics defined below.

Rubrics (for threshold value = 3)	
60% of students above 3	1 (low)
70% of the students above 3	2 (medium)
80% of the students above 3	3 (high)

These levels of attainment are then listed out according to their category for calculating the indirect PO

attainment

Indirect program attainment = Sum of levels of attainment of a PO**/3**

PO attainment is measure for all subjects and the cumulative PO is calculated.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 57.06

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 384

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 673

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 11.95

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
3.03	2.72	2.89	2.98	0.33

File Description	Document
List of project and grant details	[View Document](#)
e-copies of the grant award letters for research projects sponsored by non-government	[View Document](#)
Any additional information	[View Document](#)

3.1.2 Percentage of teachers recognised as research guides at present

Response: 4.95

3.1.2.1 Number of teachers recognised as research guides

Response: 11

File Description	Document
Any additional information	[View Document](#)

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.69

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 132

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 962

File Description	Document
Supporting document from Funding Agency	View Document
Any additional information	View Document
Funding agency website URL	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

Excel Engineering College has initiated various establishments to strengthen innovation ecosystem in the campus.

Centre of Excellence in Internet of Things (IOT)

The department of Computer science and Engineering has signed MOUs with reputed industries to enhance industry-institute interaction such as internships, industrial visits, in-plant trainings, industrial projects and guest lectures. The department has;

- Center of Excellence on "Internet of Things (IOT)" tied with Tech Trunk Ventures Pvt. Ltd, Hyderabad.
- Center of Excellence on "Data Science and Big Data Analytics" tied with ICT Academy.
- Center of Excellence on "Open source" in tie up with Red Hat Linux Academy.
- MOU has been signed with CRYPTON Technologies to aid various training programs, projects and placement.
- National Cyber Defence Resource Centre has been established with National Cyber Safety and Security Standards New Delhi
- A Remote center has been established in collaboration with IIT-Bombay

Centre of Excellence in Computer Aided Design (CAD)

Centre of Excellence in "Computer Aided Design (CAD)" has been established in the department of Aeronautical Engineering to improve the designing skills of the faculty and students. It provides plenty of opportunities for the faculty and students to understand the latest industrial practices and promote their knowledge through industry related projects using the software such as AutoCAD, CATIA and ANSYS.

Industry-Institute Partnership Cell:

The Industry-Institute Partnership Cell is well-established for promoting and nurturing the industry

linkages.

- To provide exposure to the students to supplement their learning process and the faculty to improve their teaching skills
- Industry explorer is a unique program organized every year to bridge the gap between the industry and academia for the technology transfer.

- Facilitating value added courses, industrial visits, in-plant training, industrial projects and internships for students
- Short term training to the faculty members in cutting edge technologies
- Research and Development activities in collaboration with industries
- Offering technical consultancy to the specific needs of the industries such as conducting Energy and Power Quality Audits, design, material testing etc.

Entrepreneurship Cell

Entrepreneurship Development Cell (EDC) is functioning in the College since 2013. It guides and motivates the students to become an entrepreneur through organizing several programs. Successful entrepreneurs share their experience and motivate the students to become an entrepreneur.

In view of the worldwide shortage of jobs (both Government and Private sectors) leading to unemployment/ under employment problems and lack of proper utilization of human resources, the cell strives to identify talented youth and makes them involve with entrepreneurial work.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 59

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
12	18	14	11	4

File Description	Document
Report of the event	
List of workshops/seminars during the last 5 years	
Any additional information	

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Institutional data in prescribed format	
Any additional information	

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
e- copies of the letters of awards	

3.3.3 Number of Ph.D.s awarded per teacher during the last five years

Response: 0.45

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 5

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 11

File Description	Document
URL to the research page on HEI web site	
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	
Any additional information	

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 0.17

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
8	3	12	5	5

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.3.5 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

Response: 0.78

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
40	22	47	25	17

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

We, Excel Engineering College actively organize various extension activities such as blood donation camps, saplings plantation, environmental awareness programmes, medical awareness camps, free health check-up, Science & Technical Exhibition and Educational Guidance and Exhibition (EDGE) programs, Swatch Bharat activities, conducting vocational training such as air conditioner service, welding and motor cycle repairing, computer education, water testing and analysis to public etc. The impacts of the above said activities are;

- Tree plantation organized by Rotaract Club is one of the outreach program undertaken by our students. They planted over 10000 saplings in our college campus and in nearby areas by organizing tree plantation camps. This kind of activities educate our students and public of this region for conserving our environment as green as possible.
- Guinness world record of "Largest Human Image of a Banyan Tree (national tree)" with 5284 students has been created by our institution's Rotaract club in collaboration with Rotary international District-2982 and Rotary Club of Komarapalayam. The purpose of the event is to create awareness on importance and uses of trees amongst the college students. Global warming, soil preservation, reducing air pollution and getting sufficient rain were some of the points that were registered in the young hearts to take action to save the planet earth.
- Rotaract Club of Excel Engineering College participates in the "Mahadan Blood Donation Camp" every year to bring the linkage between Engineers & Society by donating blood nearly 500 units in a week to different blood banks.
- Institution outreaches nearby government and aided schools to give them lessons on computer education, health and sanitation in schools and make them "Happy Schools". Our college has donated multimedia speakers to 60 schools. It also provides study materials to 10th & 12th standard students of Government schools to secure high marks in the public examination.
- Our Rotaract club and Rotary Club of Komarapalayam jointly organize various public awareness rallies round the year. Some of the important rallies are energy conservation awareness, impacts of plastic usage, road safety, dengue fever awareness, cancer awareness, new voter registration camps, right to vote, alleviation of illiteracy and gender issues. The impacts of those rallies create awareness, importance and knowledge to the public.
- Science and Technology Expo is another outreach program which is conducted for the school students every year. Air show, Robotics show, Race cars thrillers and prominent scientist speeches are additional feasts enjoyed by them. This creates an interest, importance and awareness about higher education among young minds.
- We outreach the students, parents and the reputed educational institutions under one umbrella by the Educational Guidance and Exhibition (EDGE), an annual activity conducted every year at Salem and Erode.
- Our students are visiting orphanages and donate food materials, gift and dress and entertain them for a day.
- We provide relief materials to the people of natural disaster affected areas. Recently we have provided relief materials to flood affected Kerala people and Gaja storm affected areas in puthukottai, Tamilnadu, India.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 2

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	0	0	0

File Description	Document
Number of awards for extension activities in last 5 years	[View Document](#)
Any additional information	[View Document](#)

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 59

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
18	12	10	10	9

File Description	Document
Reports of the event organized	[View Document](#)
Number of extension and outreach programs conducted with industry,community etc for the last five years	[View Document](#)
Any additional information	[View Document](#)

3.4.4 Average percentage of students participating in extension activities with Government

Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 62.85

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1564	1425	1350	1225	1050

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 305

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
92	70	50	52	41

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 38

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2017-18	2016-17	2015-16	2014-15	2013-14
15	13	4	3	3

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	[View Document](#)
Details of functional MoUs with institutions of national, international importance,other universities etc during the last five years	[View Document](#)
Any additional information	[View Document](#)

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

Introduction:

Excel engineering college has adequate infrastructural facilities for teaching-learning. Institution is spread out in **120 acres** of green-campus. The College has adequate number of ventilated Class Rooms, Tutorial Rooms, Smart-Class Rooms, Common Rooms, Laboratories, AC Computer Labs, Seminar halls, Auditorium, Library, Research Centres, Rest Rooms, Staff cabins, HOD cabins attached with Office and Department Library. The College has Placement Cell, Training Division and Industry-Institute Partnership Cell.

(a) Classrooms

Excel Engineering College has **25861.66 Sq.m** built up area as per AICTE Norms. It has housed 48 Class Rooms, 6 Smart Class rooms, 6 Tutorial Rooms, 17 Rest Rooms and 2 Common Rooms.

(b) Conference/Seminar Halls:

The College has 7 Seminar Halls/Conference Halls with AC facilities, adequate Public Addressing System, LCD Projection Systems, Recording facility and Lecture Capturing facilities.

(c) Library:

The College has library with area of **859 Sq.m**, e-Governance facilities with good ambience for staff and student learning process. Library has 41046 books, 9368 titles, 300 RareBooks, 126 National Journals, 922 International Journals, 746 Back volumes, 786 Project reports and 64 Special reports (Conference/Workshop reports). The library is automated using Integrated Library Management System (Autolib5.1). Library is facilitated with IEEE, DELNET, MAT, CLARO, BCL and NDL membership. Library has remote access to e-resources with a connectivity bandwidth of 100 Mbps. The working time of Library from 8.30 AM to 8.30 PM. The Utility rate of the library per day is 23.57%.The library can accommodate 300 members at a time

(d) Laboratories:

The Institution has laboratories as per AICTE and Anna University Norms. The Institution has 40 laboratories (**4960.9 Sq.m Areas**). All the Laboratories are equipped with safety equipments such as Fire extinguishers, Non slippery floors, "DO's and DON'Ts" awareness board, First aid box and Safety precautions board. List of experiments details and cost of each lab is explicitly illustrated in each laboratory. Each laboratory is maintained by faculty member and lab assistant.

(e) Computing Equipments:

The Institution has 12 Computer Centres with **617** Computer systems. It maintains a student computer ratio of **5.2:1** against the AICTE requirement of **6:1**. Department are facilitated with specialized computing machines such as CNC Machine, Robotics etc. The institution is equipped with 9 Wi-Fi hot spots and Internet facility with a bandwidth of **100 Mbps**. The College is provided with HP Blade Server, Storage Server (12TB), Internet Server, Open Source Server (1TB), IT Server, Biometric Server and McAfee Antivirus Server.

(f) Other Facilities:

The Institution has exclusive well ventilated hostel rooms attached with rest rooms/bath rooms for boys and girls separately. Separate mess for students from South-India, North-India and Foreign Countries. Institution provides hygienic and good quality food (veg and non-veg). Institution is provided with 12 RO water supply points with a capacity of 4000 lphs of RO water.

The institutional has medical centre with doctors and nurses. The institution is provided with ambulance facility for medical emergency service. The pharmacy provides concessional prize for medicine.

Institution provides beauty parlour, reprographic centre, canteen and stationary shops to facilitate students.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

Response:

Introduction:

The institution has adequate facilities for sports, games (Indoor-outdoor), Gymnasium, Yoga centre and cultural activities.

(a) Sports:

The Institution has a well established play ground with an area of **37577.46 Sq.m**. Institution has 3 male Physical Directors and 1 female Physical Director to train the boys and girls respectively. Every year various sports events conducted in the sports day. Institution provides free transport facility, hostel facility, food facility to participants and office bearers. Institution encourages our Students to participate in Sports & Games conducted in Colleges, Districts and State. Students and Physical Directors are encouraged by

providing TA and DA.

(b) Games:

Institution has adequate Indoor and outdoor games facilities.

(i) Outdoor games:

Institution has spacious outdoor game facility with an area of **37404.46 Sq.m**. It has one Cricket ground with 26766 Sq.m area, 2 Volley Ball court with 390 Sq.m area, 2 Foot Ball court with 4952 Sq.m area, 2 Basket Ball court with 904 Sq.m area, 2 Ball Badminton 628 Sq.m area, 9 Shuttle Badminton court with 879.66 Sq.m area, 1 Handball court with 844 Sq.m area, 1 Hockey Court with 2476 Sq.m area, 1 Kho-Kho court with 518 Sq.m area and 2 Kabadi court with 348 Sq.m area.

(ii) Indoor games:

Institution has a total of 173 Sq.m indoor games area. Institution has the indoor games facilities such as Table-Tennis Tables, Chess and Carom Boards. Indoor games competitions are conducted during the sports day.

(c) Power Gym:

Institution has Power Gym for both boys and girls with facilities such as Bench Press, Tumbles, etc. Institution has 3 gyms with a total area of 265 Sq.m for boys and 1 gym with a total area of 85 Sq.m for girls. The power gym facility is opened from 4AM to 7AM in the morning and 5PM to 9PM in the evening including Sundays & holidays. Boxing training is also provided in the institution.

(d) Yoga Centre:

Institution has spacious yoga centre with a capacity of 150 participants. Institution has 2 yoga trainers. Hostel students are given yoga training regularly from 5AM to 6AM in the morning. Yoga centre celebrates International Yoga Day with a participation of more than 2000 students and faculty members

(e) Cultural Activities:

The institution has various cultural clubs namely Fine arts Club, Science Club, Maths Club, and Literary Club (Music club, Dance club, singing club, Tamil pattimandram etc). Cultural competitions are being held during Annual day. Students have participated in the inter department level and inter college level competitions and won prizes, laurels to the institution.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 61.19

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 41

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document
Link for additional information which is optional	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 35.08

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
71.31	131.40	167.29	99.22	94.26

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document
Any additional information	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The library has Integrated Management System called AutoLib (Ver5.1). The AutoLib has functionalities

that enable a library to manage its housekeeping operations viz., acquisition of books and materials, creation and maintenance of catalogue database, circulation of its holdings, transaction etc. CCTV cameras are installed in the library for strict surveillance

SALIENT FEATURES OF LIBRARY MANAGEMENT SOFTWARE

1. Database Management - Cataloguing

This module allows creating, updating/editing and maintaining the following databases.

- Books, Book-Bank, Thesis, Proceedings, Standards, Conference Proceedings, Reports, Patents, etc.
- Journal- Issues, Articles, Bound Volumes
- Non-book materials/CD, Video/Audio tapes, Microfilm, Microfiche, News paper clippings
- Members, Departments, Courses, Groups
- E-Books - Digital Content
- **Authority List** - Authors, Publishers, Suppliers, Subjects, Keywords

2. Search (**O**nline **P**ublic **A**ccess **C**atalogue)

This module is designed to search all the above databases using important fields and print the search results in any desired format/order. This module search the database using important fields such as Accession Number, Call Number, Author, Title, Edition, Year, Publisher, Subject, Keywords, Department, Availability, etc.

3. Circulation Management – Transaction

This module is designed for all types of counter transactions such as:

- Issue/Renewal /Return/ Reservation
- Reminders/Overdue receipt/reports
- Transactions Statistics/Reports

4. Report Management

It generates a large number of reports such as: List of books by author, title, unique titles publisher, supplier, call number, subject, dept, accession number, date, book type and list of journals/publishers/suppliers/members, etc.

6. Acquisition Control System (Book Ordering)

This module is designed to automate various activities involved in book ordering & processing.
Features

- Indent - request for new books
- Approval, processing, book ordering
- Receipt of documents and invoice processing
- Order follow-up, payment to suppliers
- Budgeting and accounting

  - Status reports, vendor information, etc.

7. Serial Control System -(Journals) - This module is designed to automate various activities involved in subscription of journals.

Features

  - Creation and maintenance of journal master
  - Subscription /renewal of journals
  - Invoice processing, payment
  - Claiming missing issues/replacement

8. Article Indexing

This module allows creating and maintaining journal articles database. It also allows searching and retrieving data based on several fields/criteria.

9. Question Banks

This modules allows to create and maintain question banks and retrieve questions

10. Online Stock Verification

This module allows for online stock verification of library resources using Barcode Scanner, Data Capturing Unit and generate reports of books such as - missing, lost, issued, binding, transferred condemned, available, etc.

11. Student Gate Entry Register

To monitor the usage of Library resources by students, faculty and others

12. Web Library

This moduleallows searching various databases using browsers on LAN/Intranet/Internet environment using WEB servers.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

The library has been collecting rare books, manuscripts and special reports etc. over the years from the inception of Excel Engineering College. Steps have been taken to collect more rare books, manuscripts and special reports as these books & documents are very essential for reference in the new CBCS system.The library also stocks ample books on personality development and communication skill, leadership, books on motivation, poetry etc. Every year IQAC audit is carried out to find the requirement of rare books, manuscripts and special reports. Suggestions are forwarded to DAAC as well as Governing Council for necessary action to enhance the knowledge resource for library enrichment.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.2.3 Does the institution have the following:

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 13.56

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
6.80	11.99	13.01	20.50	15.52

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 23.65

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 636

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Introduction:

Institution has the IT facilities namely Computers, Wi-Fi Hot Spots, Smart Class Rooms, Projectors, Internet, OHP, Computer and e-Governance Software and Server, as per AICTE Norms.

(a) Computers:

Institution updates and upgrades the computer facilities as per the requirement and intake of the students periodically. Prior to 2016-17, a total of **587** computers were purchased (HP compact with intel core duo processor and Acer with Intel Pentium processor computers). In 2017-18, **30** number of computers were purchased (Intel dual core 360 at 2.7GHz and intel Pentium core 2 duo). There were 10 computer centres prior to 2016-17, and presently 12 computer centres are available with 617 computers. All the computers are interconnected through optical fibre as well as wireless network. The computers are interconnected using switches and optical fibres.

(b) Wi-Fi hot spot:

The college is equipped with 9 WiFi hot spots as of now. In 2012-13, there were 4 hotspots with 900 Mbps bandwidth capacity commissioned with coverage area of 2 kms. In 2017-18, 5 more hotspots with 1.01 Gbps bandwidth capacity are added with coverage area of 3 kms. Initially Wi-Fi connectivity was extended to department and office promises. In 2017, entire campus including boys and Girls Hostel, Guest House, Admission Blocks, Placement Cell, IIPC and Security Section are well connected with high speed WiFi facilities.

(c) Smart class room:

Smart class room facilities installed in the department in the year 2017-18 for better teaching-learning process. Presently 6 number of smart class rooms are available. In 2018-19 smart class rooms are updated with lecturer capturing system facilities and recording facilities.

(d) Projectors :

 Prior to 2017-18, 22 numbers of projectors were available in the campus. In 2017-18, 35 numbers of projectors are updated.

(e) Internet :

 In 2012, a bandwidth of 14 Mbps was available. It was updated to 20 Mbps in the year 2016. In 2017, the bandwidth is increased to 100 Mbps. Entire campus is connected with internet facilities.

(f) Other facilities:

 All the computer terminals were updated from normal cable connectivity to optical fibre connectivity. Prior to 2017-18, 6 numbers of Servers were in the campus, now it is upgraded to 7 numbers. Institution conducts Webinar periodically. E-governance softwares are used for planning and development, administration, finance and accounts, student admission support and examination.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

4.3.2 Student - Computer ratio

Response: 4

File Description	Document
Any additional information	[View Document](#)

4.3.3 Available bandwidth of internet connection in the Institution (Lease line) >=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	[View Document](#)

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	[View Document](#)
Any additional information	[View Document](#)
Link to photographs	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 65.5

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
231.73	207.24	220.25	260.07	135.53

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	[View Document](#)
Audited statements of accounts.	[View Document](#)
Any additional information	[View Document](#)

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

Introduction

Our institution has well established maintenance systems for maintaining physical, academic and support facilities.

Physical facilities Maintenance

An exclusive housekeeping department takes care of the complete campus maintenance. The Class Rooms, Tutorial Rooms, Smart Class Rooms, Laboratories, Seminar Halls and Rest Rooms are cleaned on daily basis. This ensures the proper cleanliness of the campus. During the class committee meetings, students feedbacks are taken on infrastructure maintenance complaints and suitable remedial actions are made. IQAC Infrastructure Coordinator ensures quality of maintenance of physical facilities.

Academic facilities Maintenance

All the equipments, instruments, machineries are properly used and maintained as recommended by the manufacturer to minimize the wear and tear. Our Institution has a list of genuine vendors for maintaining and up keeping the infrastructure. The stock verification is being carried out every semester and maintenance requisitions are invited from lab in-charges through proper channel.

(a) Support facilities Maintenance

The Estate Office appoints external agencies for the maintenance of lifts, fire extinguishers, fire systems and generator. To maintain the internet connectivity and CCTV security system, system administration team is appointed. 24/7 maintenance system provided for effective maintenance of all works in the campus. Institution has a exclusive maintenance mechanism where students and faculty member can lodge their complaint on electrical and plumbing faults. The maintenance team will rectify the problems immediately on 24/7 basis. There is staff to look after the maintenance and repair work of furniture and

fixtures and other physical infrastructure.

Following work is being carried out by Computer and System Maintenance department

* ERP Software support and maintenance
* Uploading of data on college website
* Renewal of software agreement such as Microsoft campus agreement etc.
* Online University examination
* Installation and upgradation of software
* Hardware maintenance of computer
* Keeping the records of all computers and peripherals including printers
* Lease line and BSNL line for Internet: Maintenance & Service
* Maintenance of all UPS
* Maintenance and service of CCTV cameras and backup of video recorded.
* Campus wide networking

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 57.37

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1519	1467	1213	1184	741

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	[View Document](#)
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	[View Document](#)
Any additional information	[View Document](#)

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 29.94

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
965	843	733	510	229

File Description	Document
Any additional information	[View Document](#)

5.1.3 Number of capability enhancement and development schemes –

1. **For competitive examinations**
2. **Career counselling**
3. **Soft skill development**
4. **Remedial coaching**
5. **Language lab**
6. **Bridge courses**
7. **Yoga and meditation**
8. **Personal Counselling**

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	[View Document](#)
Any additional information	[View Document](#)
Link to Institutional website	[View Document](#)

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 52.97

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2013	1800	836	987	273

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	[View Document](#)
Any additional information	[View Document](#)

28-12-2018 10:24:42

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 16.85

5.1.5.1 Number of students attending VET year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
561	526	350	208	195

File Description	Document
Details of the students benifitted by VET	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document
Any additional information	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 67.73

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
423	396	383	223	244

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 1.89

5.2.2.1 Number of outgoing students progressing to higher education

Response: 13

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 8

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	0	0	0	1

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
5	3	6	4	5

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years.

Response: 5

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	0	4	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Students' participation in Academic Committees

Class Committee:

A class committee consists of a chairperson, class advisor, subject teachers, and the students' representatives. Class committee meeting is held thrice in a semester. Student members are nominated based on the learning abilities like advanced & slow learners, gender, other state/country, hosteler, day scholar, scholarship holders etc. During Class committee, meeting students express their feedback regarding academic and administrative matters.

Internal Quality Assurance Cell (IQAC):

Institutional IQAC has students members to provide suggestions to the academic and administrative improvements.

Library Committee:

Library committee comprises of Principal, librarian, faculty and students as representatives. Meeting is convened once in a month where students give suggestions for the effective utilization of library.

Students' participation in Administrative Committees

Students associations:

Students association is formed in departments under the guidance of the HOD as the President. Office bearers meet once in a month to plan and carry out the activities. They conduct symposium, seminar, workshops and conferences every year.

Hostel Committees

Hostel committee comprises chief warden, warden and student representatives. Meeting is held once in a week. Committee decides the menu for the mess. Students can express their suggestions/ideas during the meeting. Sub committes include

- Mess committee
- Disciplinary committee
- Infrastructure/Recreation/sports committee
- Health and Sanitation Committee
- Antiragging Committee

Grievance and Redressal committee:

Institution has well structured Grievance and Redressal committee. Students can express the general issues related to academic and non-academic in the meeting. The chairman and other members of the committee analyse the problems and redress appropriately.

Anti-Ragging Committee:

The College has formed an Anti-Ragging committee with the Principal as the Convener. This committee effectively controls ragging, which is a violation of fundamental human rights and values. At the beginning of every year, this committee forms an Anti-Ragging Squad to control ragging. The student representatives are educated by the faculty regarding anti ragging measures and impact in turn they will educate peers.

Women's Empowerment cell:

It understanding the issues related to women, makes the college campus a safe place for women staff and students, besides empowering them to take decisions on the issues within the College Campus including Hostel. The student representatives are made aware to prevent sexual harassment and promote gender

equity among the students, teaching and non-teaching staff.

Sports Committee:

The student representatives along with the physical directors and faculty members motivate the students to participate in indoor and outdoor games. The purpose of the committee is to identify the talented students in the campus and coach them in their field of interest.

Cultural Committee:

The cultural committee consists of faculty advisor as head and students as members. The purpose of the committee is to identify the talented students in the campus and train them suitably. This committee meets once in a month to discuss and provide various oppurtunities in cultural activities.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 25.6

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
28	27	23	24	26

File Description	Document
Report of the event	[View Document](#)
Number of sports and cultural activities / competitions organised per year	[View Document](#)
Any additional information	[View Document](#)

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

Alumni Association:

The alumnus forms the major strength of the institution. The main objective is to enroll all alumni as members of the association and facilitating active participation of the alumnae in appropriate activities, events, and initiatives of the Institute. The alumni meet is conducted once in a year, where the alumni from different branches of the under graduate and post graduate programs share their views and give suggestions for the betterment of their junior students & institution/ department. The alumni meet is hosted by the management generously and the alumni are honored with mementos. Such meetings are mutually beneficial for the Institution and the alumni. This provides an opportunity for the alumni to meet their friends and act as a bridge for the faculty to share their experience, knowledge and insights. The alumni visit the institution to deliver Guest lectures and seminars for the students in their areas of expertise and motivate the young minds. Successful entrepreneurs from the alumnus are invited to talk on their success stories at various occasions of the Institute. The alumni also help the final year students of the various streams of engineering to get their project placements and summer internship in their companies or to assist them get it through their reference. They also assist the students for placement in public and private sectors and the regular alumni association meetings pave the way for the successful placements of the students.

Mentorship: Alumni can play an active role in voluntary programs like mentoring students in their areas of expertise. To utilize the rich experiences of old students of the college for the benefit. To assist the students in securing suitable jobs.

Placements: The alumni network of a college is one of the biggest sources of placement opportunities to the students. Alumni can help students get placed at their respective organizations. Job opportunities are provided by the alumni in their companies.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)
? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 10

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	2	2	2

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document
Report of the event	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

Institution has a well structured organization chart with various level of governance to achieve the vision and mission of the institution

(a) Institution Vision Mission

Institution Vision

To create competitive Human Resources in the fields of Engineering for the benefit of society to meet global challenges.

Institution Mission

- To provide a conducive ambience for better learning and to bring creativity in the students.

- To develop sustainable environment for innovative learning to serve the needs.
- To meet global demands for excellence in Technical education.
- To train young minds with values, culture, integrity, innovation and leadership.

(b) Governance, Leadership and Management

The Management actively takes part in the monitoring of the institution. The Governing Council conducts the meeting once in a year where they review the activities and recommends the new initiatives. Management allocates the funds for the development activities such as faculty requirement, academic, research, infrastructure, training, placement etc.

Perspective plan for development

Institution has perspective plan in tune with vision and mission of the Institution for the effective governance and leadership. Suggestion of the stakeholders and impeccable work of the decision making bodies result in a phenomenal growth and achievement of the perspective plan as detailed below.

- NBA accreditation for Aero, Mech, CSE and ECE
- NAAC accreditation
- Research Recognition Centre for Mech, CSE and ECE
- Permanent affiliation for Aero, Mech, CSE and ECE
- Eco-friendly infrastructure
- Solar park
- Centres of Excellence
- Science and Tech Expo

- Industry Explorer
- AICTE-PMKVY skill development centre
- BMW skill next initiative
- IIT Remote Centre
- TCSiON – Approved Centre
- Public Service online competitive examination centre
- Business English Certificate (BEC) Cambridge English Training Centre
- Hyundai Professional Development Centre
- Sewage Treatment plant
- Rain water harvesting system
- Integrated RO system

(c) Distinctive Characteristics of Mission

The vision and mission of our college focus on OBE. Aligned to that, our college moulds the younger generation more competitive as the college admits many students from rural background. Besides above, our students are moulded to be socially aware and become more responsible for contributing towards societal transformation and Nation Building along with social responsibility.

Our Chairman being the Chairman of ISTE (Tamilnadu Section), interacts with many senior professors to transform the young minds to the Nation building.

(d) Decision making bodies

The governance is reflected by effective leadership of the following decision making bodies in tune with the vision and mission of the institution

- Governing Council

- Planning and monitoring board
- IQAC
- Department Academic Advisory Committee
- Program Assessment Committee
- Timetable Committee
- Research and development cell
- Admission cell
- Training and Placement Cell
- Sports Committee
- Hostel Committee
- Transport Committee
- Anti-ragging committee
- Grievance Redressal Committee
- Women's empowerment cell
- Mentor and class advisor committee
- Scholarship committee
- Library committee
- Class committee
- Infrastructure committee

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.1.2 The institution practices decentralization and participative management

Response:

The institute practices decentralization and participative management concepts at various levels in continuous internal examination system.

Decentralization of Internal Assessment Examination/ Evaluation System

The Exam cell of the institution is decentralized into department level to conduct the Internal Assessment Examination/ Evaluation in a transparent manner. Three Internal Assessment Examinations are conducted in each semester as per University regulation and achieved the expected Course Outcome (CO) in each course. The various levels of team participate in the Internal Assessment Examination/ Evaluation System as appended below.

Administrative Level

Principal delegates the autonomy to the Head of the Departments and Department Examination coordinator to conduct the Internal Assessment Examination/ Evaluation at the department level effectively and efficiently. IQAC prepares the academic calendar at the institution level on considering the uploading dates of internal marks in the university web portal. The department exam coordinators prepare the schedule for the Internal Assessment Examinations and it is reflected in the department academic calendar. The hall superintendents are allocated for invigilation by the coordinator. The squad for monitoring the fair conduction of the internal examination is deputed by the IQAC.

Teaching fraternity Level

Head of the department forms the scrutiny committee for preparing question papers and evaluating answer scripts based on the specialization and seniority. Teaching fraternity is given an opportunity for setting two set of question papers in their respective subjects adhering to Blooms Taxonomy. The quality of the question papers is scrutinized for syllabus coverage, pattern, course outcomes and knowledge Levels with the quality index. Subject teacher prepares question bank covering the content of the syllabus.

Senior faculty members are given responsibility to act as the member of the squad to curb the malpractice during Internal Assessment Examination. Subject teachers evaluate the answer scripts as per the scheme recommended by IQAC.

Maximum of three working days are given for the evaluation of answer scripts and verified by the scrutinizing committee. Subject teacher uploads the internal marks in the Anna university web portal.

Student Level

Students are given an opportunity to express their grievances related to the Internal Assessment Examination in the class committee meeting. Students can convey their grievences through mail using suggestions@excelcolleges.com

Outcome

Each department takes responsibility for the effective conduction of Internal Assessment Examination due to decentralization. Faculty and students level grievances are addressed immediately at the department level.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

Introduction

The institute has a perspective plan in tune with the vision and mission of the college. Perspective plan is developed on considering inputs from various stakeholders.

Outcome of Perspective plan of the Institution

- NBA accreditation
- NAAC accreditation
- Research centre status
- Permanent affiliation
- 2f and 12B Status
- Outcome Based Education
- Improved students participation in the co and extra-curricular activities
- Scholarships

NBA accreditation process and deployment

Accreditation by NBA to four of our programs is one of the successful implementation of perspective plan based on the strategic plan.

Upon the recommendation of IQAC (after the NAAC cycle-1), we have improved in the following areas;

- Teaching-Learning process
- Research & Consultancy
- Students Progression
- Infrastructure development
- Faculty development
- Students and Society
- Self appraisal and feedback system

Teaching-Learning Process:

Each department has developed the PEOs, PSOs and POs on looking at the vision and mission of the Institution/ Department. Mapping of COs and POs/ PSOs has been practiced and attainment has been calculated. The outcome based education (OBE) has been meticulously practiced.

A regular internal and external academic administrative audit (AAA) has been conducted in a regular frequency by the IQAC. The observation of the audit is discussed in the meeting and suitable remedial action is initiated from the IQAC.

Research & Consultancy

As per the recommendation of IQAC more numbers of Ph.D holders have inducted in the institution. Students are encouraged to work with innovative project. Few of projects have received the grants from the government. All the faculty members have started publishing the papers in conferences/ journals.

Students Progression

Students have been encouraged to participate and organize events. Students participation in paper presentation, internship, in-plant training have been improved over a time.

Students and Society

To link the bondage between students and society, many extension activities have been conducted. Students are encouraged to participate in the social service. Few of the extension activities where our students contribute the society; Helmet awareness, Blood donation camp, Voting awareness rally etc

Infrastructure development

Based on the perspective plan, following improvements have been done at the infrastructural level

- Research laboratories are established in the departments
- The bandwidth of Wi-Fi has been improved

Faculty development

Faculty members are encouraged to update their knowledge by sponsoring them for conference, FDP, seminars and workshop in the leading institution. Through ICT academy, institution has organized many FDPs and online courses to teaching fraternity and students

Self appraisal and feedback system

Self appraisal system has been implemented to evaluate the performance of the faculty members and suitable suggestions are given for professional developments. Feedback system is implemented at various levels as detailed below and remedial actions are initiated.

- Students feedback
- Recruiters feedback
- Parents feedback
- Staff feedback
- Alumni feedback
- Employer feedback

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document
Strategic Plan and deployment documents on the website	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

Functions of Various Bodies

1. Functions of Governing Council

The Governing Council being the supreme administrative authority of the Institution performs the following functions:

- Monitors the academic and other related activities of the college.
- Recommends Staff Selection Committee and accords the approval
- Taking policy decisions with respect to the communications from the University, Government, AICTE, etc.
- Monitors the Students and Faculty progress.
- Recommends the Planning and Monitoring Board of the institution for implementation.
- Approves the annual budget of the college.

2. Functions of Planning and Monitoring Board

Planning and Monitoring Board performs the following functions

- Reviews the academic and other related activities of the college
- Reviews the progressions of students and faculty
- Visualizes and formulates perspective plans for the development and growth of the institutionand facilitates implementation of the provision
- Plans for resource mobilization through industry interaction, consultancy and extra-mural funding
- Promotes research and extension activities in the college campus
- Promotes teaching innovations and placement programs.
- Plans for sustaining the quality of education, quality improvement and accreditation of the college
- Recommends schemes for promoting participation of academic departments in community development activities in the region

3. Functions of Internal Quality Assurance Cell

- IQAC was formed to ensure and promote the quality of education.
- The progress of curricular, co-curricular and extra-curricular activities is monitored periodically by the IQAC. The coordinating team comprises of
  - Academic Coordinator
  - Teaching Coordinator
  - Activity Coordinator
  - Exam Coordinator
  - Research Coordinator
  - IIPC Coordinator
  - Website & News letter Coordinator
  - Alumni & Scholarship Coordinator
  - Training & Placement Coordinator

4. Functions of Women Empowerment Cell

- Motivates the women students and staff to exhibit their skills in a holistic manner
- Enquires the complaints received from the aggrieved women in respect of sexual harassment and suitable recommendation is forwarded to the Principal
- Conduct the events related to the women empowerment
- Suggests facilities/events for the betterment of women in the campus

5. Functions of the Discipline and Welfare Committee

- Analyzes and recommends the suitable punishment to the malpractice in examinations
- Restores discipline in the college campus and hostel premises
- Supports Anti-ragging Committee on the complaints of ragging
- Supports Grievance and Redressal Committee on harassment of weaker sections
- Visits the premises of college and hostel periodically to recommend improvements in amenities and maintenance of facilities.

Service rules and amenities to the staff are followed as declared in the college website (http://www.excelinstitutions.com/excel_engg/pdf/collegeinformation.PDF) and it is transparent to the staff. The appointment of Faculty members is done with utmost care as the Faculty members are the one who transform the students as skilled Engineers. Keeping this in mind the Excel Engineering College follows a systematic approach to ensure appointing the efficient faculty members.The performance of

Faculty members are monitored through performance appraisal system annually.

Diagram of the Organogram of the Institution is given as **ANNEXURE 6.2.2** in Additional information.

File Description	Document
Any additional information	[View Document]
Link for Additional Information	[View Document]

6.2.3 Implementation of e-governance in areas of operation

1. **Planning and Development**
2. **Administration**
3. **Finance and Accounts**
4. **Student Admission and Support**
5. **Examination**

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	[View Document]
ERP Document	[View Document]
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	[View Document]
Any additional information	[View Document]

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

Excel Engineering College conducted many activities in the area of Academic, Research, Co-Curricular,

Extracurricular activities, Sports and Cultural activities etc. The effectiveness of various bodies, cells, committees are evident through one of the activity i.e 6th Graduation Day Ceremony which was held on 23.07.2017. In order to conduct the ceremony effectively, the Conveners, Coordinators and Committee heads were constituted by the Head of the Institution. The Convener Dr.G.Nallakumarasamy, HOD/MECH conducted the meeting and members for various committee, their duties and responsibilities have been finalized as per the requirement to ensure the event a grand success.

The 6th Graduation Day Ceremony was inaugurated by the Chief Guest Shri.K.Venugopal, Director, NTTF, Bangalore and delivered the message on opportunities for young graduates in India. Special guest Shri.S.Manikandan, Founder and Director of SPERO Mobility and Energy Solutions Pvt.ltd, Coimbatore suggested initiating the startup industries for the growth of the country.

The high lights of the 6th Graduation day ceremony are

- 294 UG & 52 PG graduates received their degree certificates.
- Three students secured Anna university Ranks and honored by Chief Guests.

The following sequence of the activities which were carried out after constituting the various committees is

- **Registration/ Spot Registration committee:** Registering the Graduates & updating Alumni details.

- **Co-coordinating with Robes, MOC & Agenda committee:** Invocation and announcements.
- **Reception & Hospitality committee:** RANGOLI at main points, Bouquet for VIPs and Refreshment
- **Stage Arrangement committee:** Flux Banners, Water bottle, Chair Arrangements.
- **Seating Arrangement committee:** Collection & Arrangement of Chairs, plants pots, registration desks and Sign board for graduates.
- **Degree Certificate/Rank Certificate committee:** Design and distribution of Certificates.
- **Alumni Meet/Alumni Association Registration committee:** Arrangement of Alumni Meet in respective department.
- **Photo/Robe Committee:** Instruct students to collect the robe from robe contractors. Photo arrangement for graduates.
- **General Arrangements committee:** Refreshment to graduates and parents,
- **Accommodation for students & Parents committee:** Arrangements of rooms in the hostel.
- **Public Relation committee:** Preparation of Advertisements for the Newspapers, Write ups, Wide coverage in media - Both Electronic and Print Media and Press hospitality
- **Procession Arrangement committee:** Distribute the form of procedure for convocation to Chairman, Principal and HODs.
- **Drums committee:** Arranging the drums team.
- **Discipline & Control committee:** To guide the graduates to sit in their respective place. To guide the students to form the line in registration number wise.
- **Food arrangement committee:** Lunch for all Graduates, Parents & Staff Members in Ladies Hostel
- **Electrical & PA System committee**: Ensuring uninterrupted power supply
- **Transport committee:** Arrange extra buses for nearby station to pick up the graduates and their parents.

File Description	Document
Any additional information	**View Document**
Link for Additional Information	**View Document**

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The institution has well placed effective welfare measures for teaching and non-teaching staff. Welfare measures include various facilities, services and amenities provided for improving their academic and career growth, health, efficiency, economic betterment and social status. The welfare measures followed in our Institution are

Faculty Members

- Fees concession to the wards
- Accident Insurance
- 50% concession in Transport
- Gift during Diwali festival
- Concession in dispensary
- Free medical consultation by the resident doctor
- First aid and 24x7 ambulance service
- Twelve days on duty for Faculty Development
- Twelve days on duty on university assignment
- Twelve days casual leave
- 14 days each in summer and winter vacation
- 5 days leave for marriage
- 50% Registration fee sponsorship for attending outside programs
- Incentives for authoring books and publication in referred journals and reputed conferences
- Organizing orientation program in every semester
- Awards and rewards for meritorious work
- Availability research centre facilities for pursuing Ph.D.

- Maternity leave

Non teaching Staff

- 7 days vacation per year
- 100% Free transportation
- Accident Insurance

- Gift during Diwali festival
- Concession in dispensary
- Free medical consultation by the resident doctor
- First aid and 24x7 ambulance service
- Maternity leave
- Partly sponsored by college for the tour funded by staff club

Institution has housed medical centre with dispensary attached to it. Medicine are distributed to all at concessional rate. A qualified doctor is available in the campus. First-aid and ambulance service is readily available in the campus. Dispensary has both allopathy and homeopathy medicine.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 33.55

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
96	74	80	45	37

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	View Document
Any additional information	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 8

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
10	8	8	7	7

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 67.42

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
187	154	177	66	84

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

Self appraisal is an annual performance review system where faculty members evaluate their performance. The self appraisal defines the objectives and performance standards expected from the faculty members.

The Structure of self appraisal for Faculty members consists of the following parameters

- Teaching, Learning and Evaluation components
- Research and Consultancy
- Students Progression
- Department and Institution Development
- Awards and Recognition
- Any other important information to be conveyed

Teaching, Learning and Evaluation components

Teaching, Learning and Evaluation components consist of the following categories.

- Result analysis: Pass percentage and Class average
- Participation in FDP, Seminars and workshops
- Organizing FDP, Seminars and Workshops
- Usage of ICT facilities and Pedagogical methods

Research and Consultancy

The research and consultancy components consists of

- Papers presented in the Conference
- Papers published in the Journals
- Participation in research activities
- Funded project proposed and sanctioned
- Consultancy work undertaken and revenue generated

Students Progression

- Student participation in seminars, workshops, contests
- Paper presentation by the student in the conference/ symposium
- Paper published by the Students in the journals
- Internships/ industrial projects arranged for students
- Student participation in activities
- Placement referred to the students

Department and Institutional Development

- Faculty contribution for the development of the department and Institution
- Faculty roles and responsibilities in the department work
  - Faculty advisor/ Class advisor
  - IQAC coordinator
  - Members in department/ Institution level committee

Awards and Recognition

- Awards won at state, national and international levels
- Recognition such as peer reviewer, guest lecture, board of study members etc.

Any other important information to be conveyed

The Structure of self appraisal for Non-teaching staff consists of the following parameters.

- Years of service in the Institution
- Skill Development undergone
- Contribution to the laboratory maintenance and development
- Participation in the departmental activities

File Description	Document
Any additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

A financial audit is an independent, objective evaluation of the Institution's financial reports and financial reporting processes. The primary purpose for financial audits is to give Management, Principal and HODs reasonable assurance that financial statements are accurate and complete. Internal financial auditors are Institution employees while the external auditors work from an outside audit firm.

Internal Audits

All the internal transactions are audited by the audit team at institutional level. The institution conducts internal finance audit regularly: payments, receipts and accounting on daily dealings carried out by the Senior Accountant such as,

- Monthly salary for all the employees of the Institution
- Grocery for Hostel mess
- Audit on income and expenditure towards the events such as seminars, workshops, conferences, value added courses, sports and games etc.
- Remuneration and gifts to invited speakers, experts, juries of the events etc.
- Purchase of instruments/ equipments, computers, stationeries, books etc.
- Maintenance of accounts towards construction, computer, lab equipments, landscape, hostel & mess, transportation etc.

External Audits

At the end of Financial Year annual accounts statement viz., Balance sheet, receipt & payment and income & expenditures are forwarded to the External Auditor for final auditing. The audit of accounts and submission of income tax return are being carried out every year. It comprises

- Salary audits
- Budget audit
- Fees received audits
- Maintenance audit
- Expenditure audit
- Cost audit

File Description	Document
Link for Additional Information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 935.89

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
243.58	215.57	202.78	169.90	104.06

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The major source of income for the college is through fee collection. The trust takes care of capital expenditure on infrastructure and functional expenditures.

Proper utilization of financial resources is planned at the beginning of every academic year. Finance department is responsible for mobilization of funds through collection of tuition fees. The finance department is also responsible for optimal deployment of funds on the payment towards salary, tax,

suppliers, contractors, service providers etc.

Every department submits the budget proposals based on the requirements planned for the academic year. This is consolidated at the college level and submitted to the management for the approval. Based on the budget sanctioned, funds are released on priority basis. Every financial transaction is recorded and updated in the centralized accounting system.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

Internal Quality Assurance Cell (IQAC) contributed to assure the quality continuously through Academic Administrative Audit (AAA) process and to enhancestudent's performance through mentoring system. Based on the recommendations of the IQAC, the Institution has upgraded the quality in every vertical of the development.

Major Recommendation of IQAC (To be uploaded separately)

1. IQAC Academic and Administrative Audit

Periodic Academic Audit is carried out to ensure the quality in teaching-learning process.

Objectives

- To ensure the effectiveness in course delivery, assessment methods and attainment of COs and POs
- To ensure the quality process in the administration

Structure of Academic Audit

Academic IQAC audit are conducted to assess the academic process towards the attainment of COs & POs and to improve the teaching-learning process. Internal audit is conducted by a team of members comprises of senior faculty members of other departments. IQAC facilitates the audit format to the auditing team. Once the IQAC completes Audit format, the report is discussed with respective HOD and one week time frame is given to the respective department to ratify the observation. Upon the ratification, the report is submitted to the IQAC and gives suitable recommendations for improvement.

Documents audited are

- University regulation and syllabus book
- Timetable & individual faculty timetable
- Students' name List
- Minutes of Class committee meetings
- Faculty Log Book and Attendance statement
- Course Fileand learning materials
- Sample copy of internal answer papers
- Consolidated mark statement

- Sample of Assignments, Seminar presentation, case study etc.
- Project (Mini-project / Final semester project) progress review reports.
- Details of Value added courses with feedback and remedial Measures
- Remedial/ Bridge/ Extra classes by the faculty members
- Consolidated semester Result Analysis
- Audited stock book and budget

2. Mentoring System for Advanced and Slow Learners

Mentoring is the process usually face-to-face between the teacher and the students for the transformation of knowledge, social and the psychosocial support to work or develop professional career.

Reason for Mentoring

- Diversified students with different society stratum unable to cope up with common culture
- Medium of instruction in the earlier study induces inferiority complex
- Home-sickness and unable to cope up with hostel and college culture
- Fear of complexity on higher education

Details of the Mentoring system

- The Institution allocates 2periods per week explicitly as mentoring hour in the time-table. Apart from this, students can meet the mentor any time
- The Mentors are allocated with 15-20 students during the first semester and continued till the completion of the program.
- Mentors encourage the students to participate in academic, research, co-curricular, extracurricular and social activities.
- They analyze the SWOC of students for corrective action.

- Parents are called and students are counseled in their presence
- Mentors recommend online courses to their mentees
- Mentors take special interest to help the students at individual level for their holistic development, grow in communication skills, personality development, leadership skills, soft skills, interpersonal skills etc.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

IQAC of the Institution has brought the following reforms in the Teaching-Learning Process;

- Feedback System
- Outcome based Education System
- Teaching pedagogy in learning environment
- Skill based learning process through participative learning method

1. Feedback System

Structures & Methodologies of Operations

IQAC has implemented a structured feedback mechanism for analyzing the effectiveness of the teaching-learning process through

- Class committee meeting
- End semester feedback
- Informal feedback from the students

Class Committee Meeting

The feedback received on academic grievances related to coverage of syllabus, understanding level, grievances on the examinations, study materials, need of special or revision classes from the students are analyzed. The feedback received on non-academic grievances such as infrastructure, transportation, hostel, food, activities are solved.

In few cases, solutions are provided directly by the chairperson, whereas in other cases, problems are reported to the HoD for further action. The non-academic complaints are forwarded to the appropriate authorities by HoD for solutions and respective coordinators follow-up. Academic grievances are handled by the subject teacher and HOD. The action taken to redress the suggestions expressed in the meeting is recorded in the minutes of meeting. This kind of practice helps to improve the teaching-learning process.

End Semester feedback

The IQAC recommends end semester feedback including the course outcome as the major point in it. The IQAC has recommends a set of questions to be answered by the students using online Google form. Though hardcopy of feedback was practiced earlier, the IQAC recommends the paperless official work using digital concept. The analysis report is taken by the HOD and the faculty member may be called for

the personal counseling so as to improve teaching methods. Students' feedback on teaching-learning process is given due weightage in the self-appraisal form of the faculty members.

The feedback on teaching-learning process in terms of syllabus is recommended to University for syllabus revision.

Informal Feedback on Teaching-Learning Process

An informal feedback on teaching-learning process is collected by the course teachers, Faculty advisor, HOD and IQAC (during academic audit). This helps the teacher to involve the students through various teaching pedagogies.

2. Outcome Based Education

- ◦ Course exit survey
- ◦ Alumni feed back
- ◦ Employer feed back

Course exit survey

At the end of the program the students are asked to give their feedback on entire course of study and attainment of graduate attributes like engineering knowledge, problem analysis, and design/development of solutions etc.

Alumni feed back

Alumni feedback is collected through online. This reflects the learning outcome and benefits attained upon OBE, which includes higher education, employment and entrepreneurship.

Employer feed back

The feedback collected from the employer of the alumni about his/her performance has given due weightage to review the implications of the OBE.

Based on the constructive ideas collected, necessary measures are initiated for the continuous improvement in OBE.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 21.4

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
29	23	21	23	11

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	[View Document](#)
Any additional information	[View Document](#)
IQAC link	[View Document](#)

6.5.4 Quality assurance initiatives of the institution include:

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements**
2. **Academic Administrative Audit (AAA) and initiation of follow up action**
3. **Participation in NIRF**
4. **ISO Certification**
5. **NBA or any other quality audit**

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
e-copies of the accreditations and certifications	[View Document](#)
Details of Quality assurance initiatives of the institution	[View Document](#)
Annual reports of institution	[View Document](#)

6.5.5 Incremental improvements made during the preceding five years *(in case of first cycle)* **Post accreditation quality initiatives** *(second and subsequent cycles)*

Response:

Incremental Improvement has been made as p*ost accreditation quality initiatives*

1. Recruiting PhD qualified faculty members with collective expertise, experience, and wisdom to improve the teaching learning process in a continuous manner
2. Four UG programs AERO, MECH, ECE and CSE offered in the institute have got NBA accreditation in the year 2018
3. Anna University Research Centre approval has been obtained for the departments of ECE, MECH and CSE in the year 2017
4. Granted permanent affiliation status by the Anna University for the departments of AERO, MECH, ECE and CSE
5. 12B status has been obtained from UGC
6. Three new courses Agricultural Engineering, Biomedical Engineering and Food technology are introduced from the academic year 2018 - 19
7. The institute has implemented an ERP software – CAMU which automates the activities of examination, student registration, attendance for both staff and students, inter communication, grievance redressal, feedback system, asset management, accounting, transportation etc.
8. Project Based Learning (PBL) has also been effectively practiced and students get opportunity to implement their theoretical knowledge in working models
9. At frequent intervals guest lectures, seminars, workshops, hands on training, symposiums, conferences, motivational and career development programs, Outreach activities, Industry Institute Interactions are organized in the institute to impart Values and ethics in the students and staff.
10. Yoga and wellness activities are conducted from time-to-time for the physical and mental fitness for both students and staff.
11. Memorandum of understanding has been signed with the following organizations:
    1. Tech Trunk Ventures Pvt Ltd on Centre of Excellence on IoT
    2. ICT Academy-Centre of Excellence on Data Science and Big Data analytics in collaboration with DELL and EMC
    3. Red Hat-Centre of Excellence on Open Source
    4. Krypton-Initiative on training , Internship and Placement
    5. Premier Equipment and Tools-Industrial Visit and Internship
    6. Integrated Engineers--Industrial Visit and Internship
    7. TCSiON - digital training and online assessment
    8. PRAYOJANA construction Management training Institute – Industry Institute interaction
    9. Shri Kubhera Parivar - Industry Institute interaction
    10. CADD solutions – Training on ANSYS and CATIA
    11. SIFY Technologies – online Public examinations

File Description	Document
Any additional information	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 19

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
4	5	3	4	3

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)
Any additional information	[View Document](#)

7.1.2

    1.Institution shows gender sensitivity in providing facilities such as:
        1.Safety and Security
        2.Counselling
        3.Common Room

Response:

Gender sensitivity refers to the modification of behavior by raising awareness of gender equality concerns. This is achieved by conducting various sensitization campaigns, training program, workshop etc.

1. Safety and Security

    (a) Class room and laboratories

Institution has more than 40% of female faculty members, lady attendants and sweepers. Each department has a complaint box for the grievances to be redressed. Suggestions and grievances are posted in the mail suggestions@excelcolleges.com so that management will take the necessary actions on time. To ensure the safety in the laboratories, students are instructed to use coats while doing experiments.

    (b) Hostel safety and security

Ladies hostel is housed inside the campus with vigilant security guards round the clock to maintain the safety and security of girl students. Institution has a hostel committee to deal with the safety and security of inmates. The safety norms are displayed on notice boards. The warden calls the parents for permitting their wards to go outside for attending programs or native place. Permission letter is duly verified by the faculty advisor and HOD.

(c) Transport safety and security

The institution runs more than 24 buses in various routes for day scholars. Transport is provided to the students those who are involved in various curricular, co-curricular and extra-curricular activities beyond the college hours. For industrial visits, excursions and study tours, both genders of faculty members accompany the students to take of their needs. Institution provides transportation and lady faculty members when girl students participate in the events outside the campus. Parents' permission is sought by the department if a girl student participates in the activities outside the campus.

(d) Cyber safety

The College premises, laboratories and corridors are under CCTV surveillance to ensure effective safety of the students. Internet is available to the students and staff on basis of 24x7 and systems are protected with TACITINE firewall and McAfee antivirus software. Hostel students can avail WiFi facility around the campus after getting permission from authorities.

2. Counseling

Mentors are allocated to the students to counsel their academic and personal problems to create fearless environment. Counseling is given to the students during mentor hour and after college hours. To instill confidence among girl students, many opportunities are given to interact with successful women entrepreneurs and leaders. Interpersonal skill development and stress management programs are conducted with doctors and specialists. A doctor is exclusively appointed to address the stress and health issues in the campus.

3. Common Rooms and medical care Common rooms are available for both boys and girls. Magazines and newspapers are made available in the common room. Medical facilities like first aid box are kept for emergency. A well equipped Indian and allopathic hospital is run inside the campus. A doctor and nurses are exclusively available during the college hours to attend the student's health problems.

File Description	Document
Any additional information	[View Document](#)

7.1.3 Alternate Energy initiatives such as:

1. **Percentage of annual power requirement of the Institution met by the renewable energy sources**

Response: 33.48

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 266553

7.1.3.2 Total annual power requirement (in KWH)

Response: 796201

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 40.47

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 22368

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 55276.8

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:
- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

Solid waste management

Solid waste management is the process of collecting, treating and disposing of solid materials which is taken care in the Institution. Improper disposal of solid waste can create unsanitary conditions in turn leads to pollution of the environment and outbreaks of vector-borne diseases. To make the environment conducive for survival and retaining the natural setting, the following procedures are followed in the

campus:

- Disposal of Biological waste
- Deployment of Dustbins at distinct spots
- Proper collection of droppings from the trees and plants and conversion into manure for fertilization
- Food and vegetable wastes from mess and canteen are collected and fed to the animals inside and outside the campus
- A common ETP is functioning to treat solid and liquid waste and produce energy/gas for cooking.

Liquid Waste Management:

Due to the increase of water usage, the volume of sewage increases and safe disposal of sewage has become a cause of concern. The appropriate reuse of treated sewage is the obvious and eminent solution. Our Institution has two sewage treatment plants (STP) to recycle the waste water.

- To ensure effective utilization of waste water, the lawns, saplings and trees in the campus are watered after recycling.
- Well constructed drainage system in the form of closed collection tanks prevails in our campus. The tanks are regularly cleaned to avoid stagnation of water and the cleaning part of the process is given for outsourcing.
- There are two treatment plants (RO) to purify drinking water
- Effluent Treatment Plant is in place for effective treatment of liquid waste.

E-Waste Management:

Disposal of e-waste is an emerging global environmental and public health issue and has become the most rapidly growing segment of formal municipal waste stream in the world.

The life of the electronic items is extended by doing proper maintenance. E-waste from the computer hardware, electronic equipments etc., are normally weeded out by the institute periodically to the external vendor. The worn out batteries are disposed through the scrap vendor. E-waste materials are collected and auctioned to the concerned recycling agents. Few of the harmless items are used in the laboratories for demonstration purpose. The out dated computer mother boards, RAM, hard disks and processors are used for the purpose of hardware assembly training. Few electronic items are reused in the students' project.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rain Water Harvesting

Rainwater harvesting is the accumulation and storage of rain water for reuse on-site, rather than allowing it to run off. The rain water is collected in two large and deep wells in the south of the campus. It is used for gardens, irrigation and livestock. The harvested water is used as longer-term storage and for other purpose such as ground water recharge.

In the North-East corner we have another big pit to collect the rain water. From the top of the roofs, the rain water is collected through a delivery system to the pit, which is mainly used for gardening. 5% of the water requirement of the institution is met by the water harvested. The institution adopts sprinkler procedure in large lawns and water is very judiciously used for plantation purposes.

Benefits:

1. Helps in recharging the soil

2. Improvement in ground water quantity by percolation

3. Improves soil moisture

4. Reduces soil erosion by minimizing runoff water

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.7 Green Practices
- **Students, staff using**
a) **Bicycles**
b) **Public Transport**
c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

Our Institution has the following green practices for environment sustainability;

- **Green Landscaping with Trees and Plants**

Keeping the campus green and clean is the impelling mandated portfolio to all institutions to keep the ambiance of the environment pleasant to live with. Global Warming, Soil preservation, reducing air pollution, getting more oxygen and good rain are the outcomes of this magnificent endeavor.

We have developed a wonderful infrastructure extravaganza with the "Clean & Green Campus" as its motto to provide a natural eco friendly ambiance to the students to enjoy learning experience at the lush green atmosphere. The small seeds that we planted a few years ago have grown into a large number of trees. Now our campus is turned into an eco friendly and green campus. It includes various eco friendly trees like disinfecting germs and temperature maintain Neem tree, high oxygen releasing Bamboo trees, Pongam-oil trees, Coconut trees, Teak trees, Plantain trees etc. The Ventilation in classrooms is adequate considering natural light and air.

The Rotaract club and Green Campus Club members volunteer to sapling plantation and watering the planted saplings under their care. Sapling plantation programs help in encouraging eco-friendly environment, which provide pure oxygen within the institute and awareness among the villagers. Rotaract and Rotary international District 2982, Excel Group Institutions and Rotary Club of Komarapalayam made an attempt to set a new Guinness world record of "Largest Human Image of a Banyan Tree" with 5284 students of Excel Group Institutions at Excel campus to address global Warming and water shortage problems.

Bicycles

Students are encouraged to commute to the institution by bicycles. Students residing near the college use bicycles or walk to the college.

- **Public Transport**

Government bus stop is available near to the college within 100 meters. Students are able to avail the buses

- **College bus Transport**

The college operates 24 buses for the benefit of staff and students covering 4 districts.

- **Parking**

Parking facilities are created for two and four wheelers at three locations inside the campus to ensure safety. They are not allowed to ride inside the campus.

- **Pedestrian friendly roads**

The pedestrian platforms are laid on the sides of the main approach road towards all buildings in the campus. Well planned drainage systems across the roads are running throughout the campus to avoid stagnation of rain water.

- **Plastic-free campus**

The services of Rotaract club are utilized to make the campus plastic free. Banners and slogans are displayed at the prominent locations to create awareness on ill effects of plastics. The Rotaract club and Green Campus Club members volunteer to clean the campus periodically as a part of their service project known as "No to Plastics".

- **Paperless office**

Communication inside the campus is made paperless by using the recent advancement in communication like e-Mail, WhatsApp, Google Drive etc., and we have separate Blade server to store the documents. Usage of ICT enabled class rooms and smart classrooms provide effective teaching environment.

File Description	Document
Any additional information	[View Document]()
Link for Additional Information	[View Document]()

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.69

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
4.22	3.18	1.65	0.93	0.95

File Description	Document
Green audit report	[View Document]()
Details of expenditure on green initiatives and waste management during the last five years	[View Document]()
Any additional information	[View Document]()

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. **Physical facilities**
2. **Provision for lift**
3. **Ramp / Rails**
4. **Braille Software/facilities**
5. **Rest Rooms**
6. **Scribes for examination**
7. **Special skill development for differently abled students**
8. **Any other similar facility (Specify)**

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 17

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
6	3	4	1	3

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 16

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	3	1	2

File Description	Document
Report of the event	[View Document](#)
Any additional information	[View Document](#)

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	[View Document](#)

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Provide URL of website that displays core values	[View Document](#)

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	[View Document](#)
Any additional information	[View Document](#)

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide link to Courses on Human Values and professional ethics on Institutional website	<u>View Document</u>

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide URL of supporting documents to prove institution functions as per professional code	<u>View Document</u>

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 32

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
7	6	7	6	6

File Description	Document
List of activities conducted for promotion of universal values	<u>View Document</u>
Any additional information	<u>View Document</u>

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Our Institution has students from different parts of India and abroad. The Institution does encourage multicultural celebrations in the campus.

National Festivals

National festivals are celebrated with enthusiasm. Our students are on a mission towards better India. They come together breaking the boundaries of religion and caste. The cultural, ethnic and religious diversity in India has given rise to myriad festivals that are celebrated with unparalleled enthusiasm by students. Here is the list of festivals celebrated in the campus;

- New year is celebrated with greater aspiration
- Pongal/ Makar Sankranti, a celebration of farmers who pray for an abundant agricultural wealth.
- Maha Shivarathri is celebrated to remember the end of ignorance and darkness of the human condition, destroyed by the eternal wisdom of Shiva.
- Holi festival marks the beginning of spring and festival of colors
- Easter is celebrated to recognize the resurrection of Jesus Christ after his crucifixion
- Eid al-Fitr is celebrated at the end of the fasting month of Ramadan.
- Raksha Bandhan is a festival celebrated.
- Ganesh Chaturthi
- Onam, a harvest festival celebrated by the Malayalis
- The Navarathri Durga Pooja is performed in the campus for 7 days.
- Ayudha pooja is celebrated in the campus in a grand way
- Christmas celebrations are arranged in the campus.

Birth/ Death Anniversaries of the Great Indian Personalities

Death and Birth anniversaries of great personalities are celebrated in inclination to their values and virtues. The institution celebrates these days of national importance to recall the events or contribution of our great leaders in building the nation. Thoughts of great Indian personalities sowed into the young minds through the exhibitions and programmes conducted on these days.

- We celebrate the republic day with great ardour on recognizing the day when the constitution of the country came into force on 26th January 1950
- The 2nd October is celebrated as Bapu's birthday to remind all Indians the sacrifices of the apostle of peace given, to bestow upon the country the gift of Independence.
- The 15th August, we celebrate the Independence Day on the view of national integration and preserve the rights of each and every individual.
- 5th September is celebrated as Teacher's day, which is the birthday of Sarvepalli Radhakrishnanan, to honour the great services of the teachers.
- 15th September is celebrated as Engineer's day, which is the birthday of Sir. Mokshagundam Vishweshvaraya on technological exploration made by the great visionary.
  - The college conducted a massive plantation campaign on 15th October to mark the birth anniversary and a youth summit was organized in remembrance of Dr. APJ Abdul Kalam to foster and encourage innovation in the young minds.
  - International Yoga day has been celebrated on 21st June 2018 to provide the awareness on the importance of yoga to the society.

File Description	Document
Any additional information	View Document

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Financial and Administrative Transparency

Excel engineering college adheres to the guidelines compiled by the governing council and administrative committee to make the expenditure every year by proposing the budget including salary, purchasing of new equipments, calibrations, maintenance, service, new constructions and implementation of new ideas. The college fee is collected as per the guidelines of Anna University, Chennai. The flawless work flow is carried out with ease by the faculty members and the management by adhering organizational chart. The financial power is distributed to HoDs and Principal based on their hierarchy. Every financial year, the audited expenditure statement is published in the website of the institution.

Academic Transparency

The Institution believes in the transparency in the academic administration through decentralized delegation of administration power at every stage. Principal, being the head of the Institution, delegates the power to the HODs to administrate the academic work of the department. Ten IQAC coordinators of the department take the responsibility to discharge the academic and administration work entrust on them. Each class is administrated by class advisor. Each section of the class is mentored by three to four faculty advisors. Each laboratory has faculty in-charge assisted by a lab assistant, who is taking care of purchase, maintenance and service of the equipments. Internal Exams are conducted by the department examination cell coordinator who schedules exams and analyzes the result. University exams are conducted by the central examination cell headed by the Principal as Chief Superintendent.

The college has defined the process for carrying out academic audit in order to review the academic process and enhance the quality in the academic activities through the Internal Quality Assurance Cell (IQAC). Internal Academic Audit is conducted through the IQAC cell. Continuous monitoring of the academic activities is carried out through IQAC and action plan is recommended for further improvement.

Main Objectives of the Academic Audit:

- Ensuring the teaching delivery, assessment methods and attainment of COs, POs, PSOs and PEOs.
- SWOC analysis of the department to understand the existing process and overcome the bottlenecks.

File Description	Document
Any additional information	View Document

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

BEST PRACTICE – 1

1. Title of the Practice

Outcome Based Education (OBE) in Teaching-Learning Process

2. Objective

- To calculate the PO attainment to understand the success of teaching-learning process
- To increase the students involvement in the learning process
- To use the teaching pedagogy for effective teaching
- To prepare the students to meet the global demands in technological implementation and innovation through research

3. The Context

OBE is focused around the students for successful learning outcomes at the end of the program. The outcomes are the abilities to be developed and the performance of the students in terms of learning competence in using the content, information, ideas and tools.

4. The Practice

OBE is practiced in each department to understand the attainment of each course delivery from the following.

- **Program Educational Objectives (PEOs)**

PEOs are programme specific objectives and realized through various surveys after four to five years of student employment. PEO describes the career and professional accomplishments of an engineering graduate.

- **Program Outcomes (POs) and Program Specific Outcomes (PSOs)**

POs and PSOs are to be aligned with PEOs and graduate attributes. PSOs are specific to each program. Both are related to Knowledge, Skill and Attitude of graduates as they progress through their graduation.

- **Course Outcomes (COs)**

COs are more specific statements to a particular course in the program, which are required to be attained at the end of each course.

CALCULATING CO LEVEL FOR INTERNAL AND EXTERNAL EXAMS

Assessment and Evaluation Methods:

There are two methods for assessment namely, direct and Indirect methods where

- Direct method uses measurable student performance indicators and has standard procedures of examination, tutorial, quiz, assignment, laboratory, seminar etc.
- Indirect method aids in ascertaining/ inferring from student exit survey, alumni survey, employer survey, parents survey, students feedback, and Course End Survey.

The internal exam questions must be mapped to their CO's, this help us to list the marks obtained by students for CO. RUBRICS helps us to define the threshold through which level of attainment of a CO's are calculated. Rubrics exam used in sample calculation is

Rubrics (for threshold value = 50%)	
50% of students above 50%	1 (low)
60% of the students above 50%	2 (medium)
70% of the students above 50%	3 (high)

The Threshold value is the Minimum pass percentage for each CO in a subject.

Step 1: Calculating CO level for internal and external exams

The marks obtained by the students for each CO (internals and university) are listed out as shown in the below figure is based on the weightage allocated (max mark CO wise) for the CO's in the exam. Level of CO attainment is based on the percentage of students above the threshold percentage.

Reg no	Internal Exams																		University Exams						
	Test 1						Test 2						Models												
	CO 1	CO 2	CO 3	CO 4	CO 5	Total	CO 1	CO 2	CO 3	CO 4	CO 5	Total	CO 1	CO 2	CO 3	CO 4	CO 5	Total	CO 1	CO 2	CO 3	CO 4	CO 5	Internals	Total
16bcs 01	30	40				70		20	30	25		75	17	18	15	9	15	74	9	6	20	13	20	24	92
16bcs 02	25	37				62		25	25	25		75	18	14	8	11	9	60	8	7	15	14	19	23	86
16bcs 03	10	30				40		14	20	25		59	19	13	11	15	11	69	7	8	20	10	18	21	84
16bcs 04	14	20				24		10	17	24		51	20	15	17	14	15	81	6	4	11	15	17	17	58
No of stud ents atten ded	4	4	4	4	4	4	4	4	4	4	4	4													
Max mark C O wis	50	50	0	0	0	100	0	0	30	30	40	100	20	20	20	20	20	100	10	10	20	15	20	25	100

e																								
Thres hold 50%	25	25			50		15	15	20	50	10	10	10	10	10	50	5	5	10	7.5	10	12.5	50
No of stud ents above thre shold	2	3			2		3	4	4	4	4	4	3	3	3	4	4	3	4	3	4	4	4
Level	1	3			1		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

For example: In the above table to calculate the level of CO1 for Test 1, the marks scored by 4 students are listed CO-wise and their max mark is specified. Since 50 is the pass percentage threshold and rubrics are set for 50%, by calculating number of students above threshold (only 2 out of 4 which is 50%) the level is defined as 1(low) as specified in the rubrics

Step 2: Calculating Final CO attainment for the subject

Based on the level of CO obtained for internal and external from the above method the final CO attainment is calculated. The level of CO of each test are listed in the below format.

Internal exam and assessments						
C101	IA-1	IA-2	IA-3	Internal	Sum of Internal	University
CO1	1	-	3	3	2.33	3
CO2	3		3	3	3	3
CO3		3	3	3	3	3
CO4		3	3	3	3	3
CO5		3	3	3	3	3
Internal/ University attainments					2.87	3
Weightage					20%	80%
Co-attainment for the subject					0.25	2.40
Final co-attainment for the subject					2.97	

For measure PO in direct method a CO/PO matrix is used to measure PO. The CO are linked to the PO using the CO vs PO matrix as stated in Course Syllabus blueprint. When designing the CO, lecturers of each course map their CO to the appropriate PO to ensure that all PO are delivered throughout the study.

Defining CO weightage for a PO in CO/PO matrix, the weightage scale can be of any format (1-10, 1-100) but by using the scale 1-3 helps us to simplify our calculations

Where 1 represents Low; 2 represents Medium; 3 represents High

Calculating PO attainment for direct method

The PO attainment is calculated by using the predefined CO/PO matrix and the value of Final CO attainment for the subject

The PO attainment is calculated by using the formula

PO attainment = Avg, of CO's of a PO /3   X   Final CO attainment for the subject

For Example, if you want to calculate the PO attainment value for PO1 in the below table

PO attainment for PO1 = (Avg. of CO's for PO1 / 3)   X   2.97

PO attainment for PO1 = **2.97**

Calculating CO level for internal and external exams

This method is purely survey oriented, So the calculations are based on data and surveys collected from the following

- Current Passing out students
- Stakeholders
- Alumni
- Survey from placement officers,

The questions in the survey sheet should represent the PO's All these survey needs to be a quantified one (1, 2, 3) and they must be based on predefined levels like Rubrics defined for direct calculation. Sample rubrics for indirect calculation.

Rubrics (for threshold value = 3)	
60% of students above 3	1 (low)
70% of the students above 3	2 (medium)
80% of the students above 3	3 (high)

These levels of attainment are then listed out according to their category in the below format for calculating the indirect PO attainment

Survey	Indirect PO Attainment														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Current Passing Student	3	2	1	1	2	3	1	3	1	2	2	2	2	2	1
Alumni	3	2	2	1	2	2	2	1	2	2	3	2	3	3	1
Placement Officers	3	2	3	2	2	2	1	1	3	2	2	3	2	1	1
Indirect Program Attainment	**3.00**	**2.00**	**2.00**	**1.33**	**2.00**	**2.33**	**1.33**	**1.67**	**2.00**	**2.00**	**2.33**	**2.33**	**2.33**	**2.00**	**1.00**

The indirect program attainment is calculated by using the formula

Indirect program attainment = Sum of levels of attainment of a PO **/ 3**

For Example, to calculate indirect program attainment for PO1

PO1 attainment = 3+3+3 / 3

PO1 attainment = 3

Calculating Final PO Attainment

Final PO attainment comprises of both Direct method and Indirect method hence the found calculated value (PO attainment) are listed out corresponding to their CO. And summing up them provides the PO attainment based on the weightage allocated

Similarly PO attainment is measure for all subjects and the cumulative PO is calculated. The results from PO calculation are further used for Graduate Attribute (GA) and Program Educational Objectives (PEO) using respective matrices.

5. Evidence of Success

- The attainment factor is the evidence for successful teaching-learning process
- Students participation in the learning process has been improved
- Teachers are able to plan their lesson so that the students can understand the delivery
- Teachers are using pedagogical methods in the course delivery

6. Problems Encountered and resources required

- Communication is the basic problem for the students belonging to the rural background. Some efforts are always needed to overcome the same. Communication lab, BEC certification, Language development Hour and placement training are some of the avenues which are available in our system to meet out this challenge.
- Outside exposures are limited to the students due to the locality and economic background. Hence many training programmes are arranged inside the campus itself with the internal expertise and outside arrangements at affordable cost.

BEST PRACTICE – 2

1. Title of the Practice

Industry-Institute Relation towards Skill Development

2. Objective

- To impart the Engineering skill expected from the industries
- To bridge the gap between the industry and academia
- To make the students job-ready by the end of the program
- Groom the students to become Entrepreneur

3. The Context

There is a need to create avenues for a close academia and industry interaction through all the phases of technology development, starting from conceptualizing to commercialization. Students need to be skilled

to work on innovative ideas. The industrial linkages will help the Institution and hence the students;

- It should continue for longer period for preparing the manpower of world class in the field of technology by inculcating various skills required by the industry, thereby contributing to the economic and social development at large.
- To help design, develop and deliver training modules for students that they are made industry-ready
- To help the faculty to understand expectation of industry so that they can align their teaching to the needs of the industry
- To facilitate internships/ in-plant training/ industrial project for students to ensure that they get industry exposure during their campus days, which leads to better employability
- To groom them an Entrepreneur by inviting achievers of the industries.

4. The Practice

The various types of interactions between academic institute and industry and also at the same time the requirements of industry from academic institution are addressed regularly. It is evident that collaboration of industry and institution in skill development leads to innovations. This practice creates healthy environment in the country by which there will be an all round development.

Institution has an explicit division for industrial linkage which houses placement division under the headship of a director. They play a pivoting role to link the industries with departments based on the requirement.

The best practices of our Institute to enhance the interaction between Industries and Institute are;

- Industrial visits/tours
- Industrial training/internship
- Industrial project
- Patenting
- Industrial consultancy
- Product development through collaboration
- Participation in the industrial expo
- Inviting industrialist as guest speaker/expert
- Arranging the hands-on training in the cutting edge technology
- Entrepreneur development through industrial collaboration
- Online courses for filling the industrial gaps
- Value added courses

Students are visiting the industries as a normal procedure and encouraged to undergo industrial training and internship during their winter and summary holidays. Industrial linkage division is arranging the industries to the students to undergo training. Students are encouraged to take up industrial project which help them to understand the industrial requirement. IPR cell is conducting seminars and encouraging the students/ faculty members to register for patent if their project has novelty. Few faculty members are taken the industrial relation to the next level by taking the consultancy work from the industries. Students are involved in the development which gives more hands on industrial project. Guest lectures are organized by each department to fill the gap between the academia and the technology expected from the industries. This will enable the students to study content beyond the syllabus to make themself industry-ready. Each department conduct value added course and certificate course for the benefits of students. This will help

the students to update their knowledge in cutting edge technology. Online course linked with industrial need are announced by the department so that students can have the international certification. Department invites industrial expert for the expert lecture, functions and activities. Students could interact with the industrialist and discuss their doubts directly. Students could able understand the corporate ethics and expectation from them.

Science Expo

The college conducts Science & Tech Expo every year in the month of October to kindle young minds. It explores the innovative and creative thoughts of the young minds, finding the right persons to implement the innovative project ideas. It guides the students to explore their knowledge for real time practical training by providing laboratories with advanced equipments to motivate the students to participate actively. It also provides the opportunity for students, teachers and other people to improve their understanding of science and share their research projects and investigations. Indeed, a science fair is a good form of knowledge-building and social development.

5. Evidence of Success

- On organizing the Industry Explorer program, students are exposed to industrial expectations to focus on the real time skill set.
- Performance is improved by 30% in placement.
- Increase in participation of students in attending internship
- Industry understands the need of institution and has come forward to offer Implant Training, Industrial Visits/Projects with our continuous efforts.
- More industry participation industries in Industry Explorer program.
- More online courses (industrial skill) registration by students and staff.
- More number of funds received from agencies for student projects
- Students are encouraged to take up industrial projects
- Innovative projects are identified and applied for IPR.

- Enhancement of problem solving skill to face the challenges associated with carrying out investigation
  - Students are encouraged to participate in design contests.
  - Industrial expo has created the avenues to interact with HRs
  - Science expo where students demonstrate their projects

More efforts are taken on this ground. On the success of the same the following were realized.

- CSIR programs were arranged in the campus on technology and skill development
- Two DST, EDII sponsored Entrepreneurship Awareness Camps (EAC) were arranged on the motivation towards entrepreneurial thoughts
- DST sponsored 3 Days EAC has been arranged through CED, Madurai.
- Many Programs were arranged through ICT Academy
- Webinars are frequently used by the students through IIT Remote Centre.
- Many Programmes were attended by our students in FTI, Bangalore
- Online learning and Examinations were arranged through Amazon Web Services, Sales Forge, Yuvi Geek networks Pvt, Ltd, Red Hat and Oracle

6. Problems Encountered and resources required

- Students' communication is a biggest threat due to their family background
- Interface with leading industries is a mighty task
- Getting Industrial training/ project in software industries is a difficult task
- The institution is far away from the Industrial corridor.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Institutional Distinctiveness

Distinctiveness - Diversity of Students

Promoting diversity in the Institutions is a big challenge. We have highlighted diversity practiced and illustrate the ways to incorporate an understanding of diversity in the classroom and beyond.

The Institution has admitted students from various states in India and nearby countries such as Yemen, Gana, Korea, Saudi Arabia, Srilanka, Bangadesh, Nepal, Bhutan etc. Much discussion about diversity focuses on the forms of marginalization: Race, Gender and physical orientation.

1. Diversity in the classroom

Having a diverse group of students simply means recognizing that all the people are unique in their own way. Their differences consists of their reading level, athletic ability, cultural background, personality, religious beliefs, and the list goes on. There has always been diversity in the classroom, but it is important to embrace it and make positive use of it. Teachers value the diversity and model this attitude to their students. Teachers recognize and respect the fact that students are different and these differences are generally good things. For example, when attempting to solve a problem, teacher assembles a diverse team with many skills and many different ways of approaching the problem than a team that has all their strength concentrated in one area. Teachers playing number of roles in the classroom; yet, valuing diversity is one of the most important ones.

Here is a list of environments created where each student feels valued and respected.

- Take the time to learn students' background, interest and learning style.

- Create an environment that is conducive to each individual student to learn about each other and gain an appreciation for the diversity they bring to the classroom.
- Teach students that everyone has strength and weakness. When working in teams, students are encouraged to take advantage of their strengths of the team members to produce the best possible results.
- Invite guest speaker from different places may share certain qualities with students.
- Implement a "zero tolerance" for anything that is disrespectful, hurtful, or intolerant of diversity

2. Learning Culture, Location and Ambiance

The atmosphere in the classroom reflects the importance of the work undertaken by both students and faculty members. Anna University and AICTE are recommending English as the medium instruction. This avoids the language problem. A classroom with a strong culture for learning is characterized by high cognitive energy. There are high expectations from all students and the classroom is a place where the teacher and students value learning and hard work.

- For the weak students from other countries, the institute arranges special coaching classes to improve the performance.
- Separate hostels for Tamilnadu, Kerala, North India and other country students are in place. Food menus are prepared according to their willingness.
- Important festivals of their states are celebrated in the campus on request. Example; Kerala students celebrate Onam festival, Tamilnadu students celebrate Pongal festival and North Indian students celebrate Durga pooja as like their native. In festival day, respective students are allowed to wear traditional dresses.
- Mentors are allocated to the students to give counseling in their academic, personal problems and create fearless environment.
- College is located near to NH 544 Salem to Coimbatore main road; it is easy to go their native place. The nearby airports are Salem and Coimbatore which are 45 kilometers and 100 kilometers respectively. The nearby railway stations are Erode and Salem which are about 15 kilometers and 50 kilometers respectively. In semester holidays, the college has facilitated college buses to the students to reach the nearby bus terminal and railway station.

3. Ethical Values and Integrity

College celebrate national days like Republic day, Independence Day, International Women's Day, Engineers day, Teachers Day, etc to inculcate the importance of moral values and significances. During every program, the national anthem is being played to feel the integrity and patriotism. Anna University has provided a course called Professional Ethics and Human Values to learn ethical practices and human values among students. The institution encourages diversified students to participate and lead the activities and programmes such as conference, symposium, workshop, cultural festival, sports and college days, etc inside and outside the campus. During annual functions and alumni day, students are encouraged to showcase their native and regional talents.

4. Diversity by Community

Reservation is a form of affirmative action to uplift the status of socially and economically backward communities in India. The college is working under statutory bodies such as Anna University, DOTE and AICTE and follows the rules and regulations (community based) in reservations of admission process. The

current scenario of reservation in Tamilnadu Engineering Admission is 31% seats for Open Competition, 27% for Backward class, 3% for Backward Muslim, 20% for Most Backward and Denotified Communities, 15% for Scheduled Caste, 3% for Scheduled Caste (Arunthathiyars) and 1% for Scheduled Tribes. For the diversity in International level, Government provides the opportunity to the foreign national students under NRI quota.

5. Diversity by Different Courses

Diversity contributes to expanding the knowledge base and promotes creative thinking. The course curriculum is not the only source of knowledge in college. Group institutions have different courses inside the campus and interacting with a diverse group of people provides many opportunities to learn from others, who bring a different perspective, such as Paramedical, Physiotherapy, Architecture, Polytechnic, Yoga, Naturopathy, Siddha, Homeopathy, Arts and Science, Health Sciences etc. This exposure augments the possibilities for novel ideas and solutions on different perspectives or vantage points. This results a single-focus perspective is transformed into multi-focus, and become capable of viewing issues and problems from different angles. This engenders creativity and enhances problem solving abilities of the students.

The opportunity to interact with diverse peers, both in and out of the classroom, leads to greater active thinking, intellectual engagement and motivation. These students report confidence in creative problem-solving, a greater understanding of their field of study and increased comprehension in science and technology. Campus life is an eye-opener for many students.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

5. CONCLUSION

Additional Information :

IIT-Bombay Remote Centre in Excel Engineering College:

The 'Train 1000 Teachers' programme was initiated by IIT Bombay in 2009, under the project 'Empowerment of Students/Teachers,' sponsored by the National Mission on Education through ICT (MHRD, Government of India). The main focus of this programme is to enhance the teaching skills of faculty in core Engineering and Science subjects.

Concluding Remarks :

The Excel Engineering College was established in the year 2007 with four UG Programmes with a total intake of 240 students and 28 faculty members; the Institution stands tall today by offering 9 UG programmes, 6 PG programmes and 3 research programmes with a strength of 2407 students and 193 faculty members. The 120 acres green campus is completely encompassed by a compound wall and 10.21 acres is earmarked for Excel Engineering College.

Our beloved Chairman Prof. Dr. A. K. Natesan, a well known Philanthropist and renowned educationist of higher caliber. He is the visionary who contributes significantly to achieve quality and academic excellence in Excel Group Institutions. With the strong commitment to education, he has impeccable credentials of uplifting the young and aspiring students towards employment and entrepreneurship. Secondly, we are greatly indebted to Dr. N. Mathan Karthick M.B.B.S, M.H.Sc., the Vice Chairman of Excel Group Institution for his unreserved support and tireless service towards Excel Engineering College through his perennial inspiration. Our beloved Managing Trustee Mrs. N. Parvathy who is a source of strength to all of us with motherly passion. Dr. N. Sengottaian, Director (Tech), Dr. V. K Shunmughanaathan, Director (Administration) Dr. D. Devakumar, Director IRRP and Prof. G.Sampath, Director (Training) for their constant encouragement, motivation and guidance.

As per NAAC guidelines, we have completed the first step of Assessment and Accreditation. The Institutional Information for Quality Assessment (IIQA) is approved on 19/11/2018 with Track Id TNCOGN25807**.** It gives immense pleasure to submit **Self Study Report** of our Institution to NAAC, Bangalore for first cycle of Re-Assessment accreditation. The report is an outcome of collective efforts of all staff and students. This report is prepared as per the guidelines laid down by NAAC.