

FOR $2^{nd} \ CYCLE \ OF \ ACCREDITATION$

A. C. S. COLLEGE OF ENGINEERING

KAMBIPURA MYSORE ROAD BANGALORE 560074 www.acsce.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

December 2021

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

If it takes Courage to Dream, It Takes Vision to Execute

Dr. A. C. Shanmugam, B.A.LLB, FIMSA, FRCPS (Glasgow, UK), Founder Chairman of Moogamibigai Charitable and Educational Trust, established in 1992, B.A.LLB, FIMSA, FRCPS (Glasgow, UK), is one such visionary pioneer who has helmed varied professional educational institutions.

ACS College of Engineering envisages the motto of our Chairman "Students should be job givers not Job seekers" which perfectly aligns with "Atma Nirbhar" vision of India.

The Trust is managing RajaRajeswari Medical College & Hospital, RajaRajeswari College of Engineering, RajaRajeswari College of Nursing, RajaRajeswari Dental College and Hospital, RajaRajeswari College of Physiotherapy and RajaRajeswari Institute of Allied Health Science. The Hallmark of these institutions is its emphasis on Quality Education inculcating Learning Culture and inquisitive mind.

ACS College of Engineering has a perfect harmony between technical and holistic learning. The college students fraternity stems from all strata with greater representation from the rural areas thus contributing towards enhancement of the marginalized, which has always been the vision of Mahatma Gandhiji.

ACS College of Engineering, a Self-financing institution is approved by All India Council for Technical Education (AICTE), New Delhi, and affiliated to Visvesvaraya Technological University (VTU), Belagavi and Government of Karnataka. ACS College of Engineering is accredited by NBA for the departments of AE, BM, CSE, ECE & ME. ACS College of Engineering, Bengaluru is accredited by NACC with 'A' Accredited, ISO 9001-2015 Certified & with an International Accreditation from HLACT. Recognizing the Strive to develop innovation, creativity and knowledge, reinventing high quality & outcome driven engineering studies, ACS College of Engineering is ranked number 38th in All India level by silicon India for the year 2021.

The Institute has 9 Research Centre's approved by VTU with currently 26 scholars pursuing their PhD's in the current academic year.

The institution is located in the Bangalore-Mysore Highway with great connectivity having a spacious campus equipped to provide the best of Education, Learning and Altruistic development.

Vision

Engineering the future of the nation by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.

Mission

To implement holistic approach in curriculum and pedagogy through Industry Integrated Interactions to meet the needs of Global Engineering Environment.

To develop students with knowledge, attitude and skill of employability, entrepreneurship (Be Job creators than job seekers), research potential and professionally ethical citizens.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- NAAC 'A' Graded, NBA Accredited (5 Programs)
- The institution has three interdisciplinary programs namely Aerospace, Aeronautical and Bio Medical Engineering which integrates electrical, mechanical, chemical and life sciences principles in the development of new healthcare technologies and systems.
- Transparent admission process based on diversity of language, region, country, gender and socialeconomic consideration
- The institutional campus facilities are safe and healthy for faculty and students.
- The institution has well-equipped libraries with adequate volumes of books, journals, online resources and rare books collection. This puts the faculty and students in an erudite environment for better reading and learning.
- The institution has setup a well-structured teaching and learning process for outcome based education.
- Wi-Fi enabled campus provides access to the internet connectivity within the campus thus making enabling classes, events and webinars and more.
- Workshops, Conferences and Seminars to enhance the knowledge of the faculty and students connected with the emerging trends of their specializations.
- The institution provides adequate infrastructure to support academic and research.
- Pro Active placement and alumni cell
- The institution has functional collaborations established with reputed national and international organizations
- Internal Quality Assurance Cell (IQAC) of the institution plays a significant part in excellence enrichment by putting in place a system of quality procedure, implementation and monitoring mechanism.

Institutional Weakness

- The institution is an affiliate college to VTU and hence cannot modify the curriculum and little scope to contribute to University curriculum.
- Limited access to research grants being a self-financed institution.
- Delimit chance to attract the students being an affiliated institution.

Institutional Opportunity

- Proposing to drive for autonomous status of the institution
- Initiation of establishing the Centres of excellence in association with Industry
- o Harnessing technology to be connected with Alumni and Industry. Tap the Alumni resources as

mentors for the betterment of the current students.

• Relentless efforts by the Institution to ensure employment opportunities in the core sectors but also in unique domains.

Institutional Challenge

- To initiate flexible academic programs within the structure for the enhancement of the employability skills of the students.
- Knowledge collaboration with the industry for faculty and students
- To provide relevant technical education balancing integrity and social concern.
- Setup an effective forum for connecting with the Alumni for a more proactive role for the nurturing of the current students.
- Encourage research aptitude amongst students and cultivate a thought process inclined for innovation.
- Motivating staff to do quality research and filling the patent
- Exploit the market for consultancy opportunities with the industry and research organizations for seed capital, Research funds.
- Leverage from the Collaborative initiatives with Centers of Excellence
- Difficulties in attracting and retaining quality human resources wherein the institution is surrounded with 8 engineering colleges

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

ACS College of Engineering (ACSCE) for the Seven UG Programs and One PG programs of Engineering has articulated in accordance with the guidelines of AICTE, Visvesvaraya Technological University (VTU) affiliating university. The institution follows the curriculum designed by the respective Board of Studies of VTU, with inputs from various stakeholders.

The Institution meticulously prepares actions plans for effective implementation of the curriculum and utmost priority is given for academics. The institution makes consistent efforts to supplement the University curriculum by organizing activities, which focus on integrating academic and general development of students. The institution encourages the faculty to impart the curriculum through innovative teaching methods, which follows Guest lectures, power points presentations, assignments, discussions, workshops, seminars, training programs for students by inviting resources persons from inside and outside the state, field study eLearning, face-to-face interactions between industry experts and students apart from traditional method of teaching. Motivating students to participate in various intra and intercollegiate competitions. Use of Communication laboratory to improve basic linguistic skills of students.

Choice based credit system has been implemented in all the programs, which is having access to excellent curricular and co-curricular opportunities for enhancing academic expertise, employability and entrepreneurial skills. Post graduate engineering programs are designed with advanced core and elective courses along with

emphasis on laboratory and research work. The curriculum of postgraduate courses includes all the aspects outlined.

Institution has robust focus on OBE in all programmes and courses having well-defined objectives and learning outcomes aligned with institutional mission. Programmes are relevant to local/regional/national and global developments. Results of outcome assessment and stakeholders feedback serve as input for continuous improvement in curriculum.

Many value added courses are also made available to the students as a parts of curriculum enrichment program .Subjects that are not taught in the syllabus are identified and each department is encouraged to conduct certification courses for the same. Many of the students have obtained certificates relating to VAC such as IIT spoken tutorials, NPTEL and Intel. The institution aims to bridge the gap in between industry and academia using this VAC. The institution regularly collects feedback from all the stake holders for analyzing the effectiveness of the curriculum delivered and suggestions if any are forwarded to the universities consideration.

Teaching-learning and Evaluation

The institution adopts the student – centric learning and experiential learning as its corner stone in academic process. The most significant part of teaching learning process in the institution are structured to facilitate the achievement of the intended learning outcomes by designing the academic plan, lesson plan, innovative teaching-learning methods, MOU's with industry and research bodies, industrial visits. Providing an opportunity in curricular, co-curricular, extracurricular, project exhibitions in and out of the campus, organizing conference, seminars, workshops, guest lectures, training programmes, which facilitates achievement of learning outcome and the academic planner is uploaded in the website.

The Institution prepares the graduates to become exemplary citizen by adhering to code of ethics, professional conduct at all times. The courses are assigned to the faculty based on their competencies and specializations. Though lecture method is the pre-dominant teaching method, to make the teaching and learning more innovative and interactive the institution has been equipped with the modern gadgets like LCD projectors and other ICT tools.

To further strengthen students' the institutions uses lecture, demonstration, didactic lectures, discussion, interactive methods, Computer assisted teaching. The institution maintains the Mentor: Mentee ratio is 15: 1. Class teachers monitor the progress of students and maintain a constant interaction with the students.

The result analysis is carried out and remedial measures are adopted. Remedial coaching is in place for academically weaker students. Advanced learners are encouraged to put in efforts to secure ranks at the university examinations and guided to face competitive examinations to pursue higher levels of education. Students feedback of teachers on teaching – learning is analyzed and necessary actions are initiated. A set of PEOs, POs and PSOs are assessed using direct/indirect methods to identify educational and operational gaps to propose action plan for further integration in the strategic planning.

Realizing the importance of institutional responsibility in the teaching, learning and evaluation process, the

institution gears up adequate intrinsic mechanisms in achieving the goals of academic excellence. Freshers are given adequate orientation during the introduction programme. With all these efforts, the pass percentage of students has increased resulting in good placements and employability.

Research, Innovations and Extension

The Institution has state-art-of research facilities. ACS College of Engineering received Rs.69.92 Lakhs pertaining to research supported by Government and Non-Government Agencies. There are 43 projects supported by Government and 16 projects from non-government agencies. 21 Faculty members are recognized as a research supervisor by VTU, Belagavi. ACS College of Engineering established Institution's Innovation Council (IIC) under the guidelines given by Ministry of Human Resource Development (MHRD), Govt. of India and 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The Institution feels proud privilege to announce that it is selected as a member of MHRD's Innovation Cell in SWRO Zone. The goal of IIC is to create a vibrant local innovation ecosystem and Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas. 280 Workshops/Seminars are conducted with related to IPR/research/innovation for promoting research culture in the institution. There are 69 research scholars pursuing Ph.D. under VTU, Belagavi and 4 of them awarded doctoral degree.

As per the guidelines of VTU, Belagavi, the institution has a code of ethics for checking plagiarism by using Turnitin software. ACS College of Engineering has incentive scheme is to motivate the faculty members of our Institution to undertake quality research, consultancy and other research related activities. There are more than 300 papers published (Journal/Conference/Book chapter) in reputed indexing such as Scopus/WOS/UGC. There are 17 awards received from Government/Recognized bodies for college as well as more than 40 faculties received individual award.

The Institution have Red Cross, NSS and UBA (unnat bharat abhiyan) to involve students towards extension and social activities for inculcating the social awareness. ACS College of Engineering college have successfully conducted 55 extension and outreach programs in collaboration with NSS/NCC/Red cross/YRC etc. ACS College of Engineering have 692 linkages for faculty exchange, student-exchange, internship, on-the-job training and research. The Institution has 59 active functional collaborations / MoU's with national and international partners for academic exchange, projects, student training, internships etc.

Infrastructure and Learning Resources

ACS college of Engineering is located in a beautiful lush green landscape, free from polluted environment and excellent atmosphere and ambience ideally suited for growth of the soul & mind. It is located behind RRMCH on the Bengaluru-Mysore Highway 15 Km from the Bangalore City Railway Station and 2km from kengeri Railway Station. Campus Area is of 28,686 Square Meters. College has adequate infrastructural facilities as per the AICTE requirements, Ventilated 40 class rooms, 42 laboratories, smart class rooms(ICT enabled), 07 seminar halls, Research Centers, HOD cabins, Staff cabins, Common rooms, Rest rooms, Central & Department Library and Convention hall 28 rest rooms and 12 common rooms. The budget is allocated for

creation, enhancement and up gradation of infrastructure.

The institution has various clubs to develop technical and non-technical skills of the student. College also offers industry oriented courses for the students to have hands on experience. Innovation cell (Pongu Ventures) a business Incubator is initiated to promote entrepreneurship skills. Center for Test and Data Sciences (CTDS), an interdisciplinary center in RajaRajeswari Group of Institutions was formed to establish better collaboration between academia and industries. Also the college has established UC Berkeley and Intel intelligent System laboratory to bridge the gap between industry and academics. Apart from the books available in the library, students can also access online E-resources such as digital library to widen their knowledge and skills. The working time of library is from 9.00 am to 7.00 pm in working days and from 9.00 am to 4.00 pm in the holiday. Library has 16655 books, 70 Journals and 182 Project reports.

The institution believes in the overall development of the students in this aspect, Institution provides various facilities to our wards such as a fully-fledged auditorium wherein various activities such as seminars, yoga classes are conducted for students. The institution also provides a vast playground facility inclusive of cricket ground, volley ball ground, football ground, basketball ground etc. to promote the sports activities. The college also conducts events such as sports day, chairman trophy Tournaments, Inter colligate sports and cultural fests.

Student Support and Progression

ACS College of Engineering strives to provide a necessary assistance to the students and support their progression in terms of academics and career. The students of ACS College of Engineering are benefited scholarship by the government totally 2114 students received Rs.45,242,480/- SC/ST and OBC scholarship for the last four years. The Institution has a scholarship committee policy, where totally 313 students have been identified and sanctioned by Institution Chairman's scholarship with the total amount of Rs.9357070/- for the last five years.

Institution have conducted number of capacity building and skill enhancement initiatives taken by the institution include the following soft skills, language and communication skills, life skills and ICT/computing skills. During Pandemic times also, institution focused and have conducted various skills enhancement program to inculcate life skills and other technical skills among students. Institution conducted number of guidance for competitive examination and career counselling offered by the institution for the benefit of the students.

The Institution has effective mentoring system in which students are allotted a mentor (faculty). The mentors address the students? personal and psycho- social issues to make them feel more confident and composed. Institution has a well-established mechanism for timely redressal of Students grievances as Students Grievances and Redressal, Anti-ragging and Sexual Harassment committee. The total students placed in on / off campus is 457 for the past five years. Totally 55 students have gone for higher studies in reputed Institutions in India and abroad and few students have become entrepreneurs. There are 63 students qualified in state/national/international level competitive examination.

The students won 49 medals/awards in sports/cultural and other events at university/state/national level. Institution facilitates student's representation and engagement in various administrative, co-curricular and extracurricular activities (student council, various committees, organizing programmes). Students are motivated to participate in extra curricular / Co-curricular activities in Intra/Inter / State / National/ International level events.

Institution has a registered Alumni association and it is active from its inception. Every year our Alumnus is contributing in academic as well as financial aspects for the development of Institution. In addition, the total contribution is more than 5 Lakhs rupees.

Governance, Leadership and Management

The board of management has constituted governing council consists of eminent personalities from different areas like academics, industry, VTU, AICTE etc. who are contributing to the quality policy and monitor the varied activities of the institution. The institution has drawn clear vision and mission involving various stakeholders.

Internal quality assurance cell (IQAC) plays a significant part in excellence enrichment by putting in place a system of quality procedure, implementation and monitoring mechanism. IQAC monitors the functioning of various activities in the institution through different committees, which is constituted involving faculty, students and some external members. Student's alumni and faculty provide their feedback for improvement of the system. Each committee monitors important key aspects of the constituents of the system.

With the prior consent of the Management, the Principal plays a leading role in the governance and management of the Institution Principal communicates the vision and mission of the Institute to faculty members, students and other stakeholders. He plays the role of chief coordinator for various internal and external affairs of the Institution. He takes reviews from all the committees, teaching staff, and in charges of various departments by holding meetings with them for efficient working of the Institution. He guides the entire faculty in academic matters.

The Institution has both internal and external audit mechanism and have appointed competent person academic and administrative audit is done through a feedback mechanism by the department, condemnation committee initiates action for all the departments. Student's feedback about the faculties is taken twice a semester. Finally, they are integrated with Head of the department assessment. The management motivates the entire faculty should publish at least one research paper per semester.

Institutional Values and Best Practices

ACS College of Engineering is well prepared to handle and respond to gender sensitive issues and provide an environment where men and women can work together with a sense of personal security and dignity and create awareness about gender issues and creating an enabling environment of gender justice through various activities. Various committees like Sexual harassment committee, Discipline committee ensure discipline and harmonious environment in campus. The institute is continuously engaged in make use of alternative sources of energy, some of the measures considered are solar thermal energy harnessing by installing Solar water heaters, solar street light, biogas plant. The Institution has taken up various initiatives for degradable and non degradable waste to maintain an environment friendly campus. For the conservation of water in the institute,

the institute have facilities like roof top rain water harvesting system; bore well and pond recharge system at various points. The institute have waste water recycling system by installing sewage water treatment plant. The Institute under takes massive tree plantation efforts to neutralize carbon in and around the campus. Special attention is given to differently abled students, responding to the needs of differently abled persons, the campus is fitted with ramps, lifts, disabled-friendly washrooms and wheelchair. To build a nation of youth who are noble in their attitude and morally responsible, the institute organize several activities to build and promote an environment for ethical, cultural, and spiritual values among the students. In ACSCE for sensitization of students and employees to the constitutional obligations is done through curriculum as well as through extracurricular activities. ACSCE fosters a code of professional ethics and conduct for students, teaching and nonteaching staff to promote the core values of the institute. Our best practice is transform students project into paper publication and encourage the students to opt Research and Development as career. To offer value added courses to the students across disciplines the students trained in cutting edge open source software. ACSCE institutional distinctiveness is Institute Innovation Council (IIC) which is established to promote innovation through multitudinous modes leading to an innovation promotion eco-system.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College		
Name	A. C. S. COLLEGE OF ENGINEERING	
Address	Kambipura Mysore Road Bangalore	
City	Bangalore	
State	Karnataka	
Pin	560074	
Website	www.acsce.edu.in	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	M.s Murali	080-29749988	9900028024	080-2974899 9	principal@acsce.ed u.in
IQAC / CIQA coordinator	Selvananan	080-29748222	8884451258	-	selvanandan@gmai l.com

Status of the Institution	
Institution Status	Private

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	23-06-2009

Page 10/113 21-05-2022 06:58:20

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	04-06-2018	<u>View Document</u>
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App year(dd-mm- yyyy) Remarks months				
AICTE	View Document	02-07-2021	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

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	Kambipura Mysore Road Bangalore	Urban	5	28686.87

2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current	Academic year)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Aeronaut ical Engineering	48	TEN PLUS TWO OR PUC	English	120	63
UG	BE,Aerospac e Engineering	48	TEN PLUS TWO OR PUC	English	60	37
UG	BE,Bio Medical Engineering	48	TEN PLUS TWO OR PUC	English	60	30
UG	BE,Civil Engineering	48	TEN PLUS TWO OR PUC	English	60	5
UG	BE,Compute r Science And Engineering	48	TEN PLUS TWO OR PUC	English	120	118
UG	BE,Electroni cs And Com munication Engineering	48	TEN PLUS TWO OR PUC	English	60	18
UG	BE,Mechani cal Engineering	48	TEN PLUS TWO OR PUC	English	60	8
PG	Mtech,Civil Engineering	24	BE OR BTECH	English	30	14
Doctoral (Ph.D)	PhD or DPhi l,Aeronautic	72	ME OR MTECH	English	14	0

	al Engineering					
Doctoral (Ph.D)	PhD or DPhil,Bio Medical Engineering	72	ME OR MTECH	English	8	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	72	ME OR MTECH	English	16	0
Doctoral (Ph.D)	PhD or DPhi 1,Computer Science And Engineering	72	ME OR MTECH	English	30	0
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Commu nication Engineering	72	ME OR MTECH	English	22	0
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	72	ME OR MTECH	English	30	0
Doctoral (Ph.D)	PhD or DPhil,Physic s	72	MSC	English	8	0
Doctoral (Ph.D)	PhD or DPhi l,Chemistry	72	MSC	English	10	0
Doctoral (Ph.D)	PhD or DPhi l,Mathematic s	72	MSC	English	14	0

Position Details of Faculty & Staff in the College

				Te	aching	Faculty	y					
	Profe	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				14				19				124
Recruited	10	4	0	14	15	4	0	19	72	52	0	124
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J			0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0		1		0

	Non-Teaching Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government		7,		39						
Recruited	18	21	0	39						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				0						
Recruited	0	0	0	0						
Yet to Recruit				0						

	Technical Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government				75						
Recruited	31	44	0	75						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				0						
Recruited	0	0	0	0						
Yet to Recruit				0						

Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Professor Qualificatio n				Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD	0	0	0	0	0	0	0	0	0	0		
Ph.D.	10	4	0	13	3	0	5	0	0	35		
M.Phil.	0	0	0	0	0	0	0	1	0	1		
PG	0	0	0	2	1	0	69	49	0	121		

	Temporary Teachers											
Highest Professor Qualificatio n			Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD	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 Qualificatio n	Professor			Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD	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	Male	Female	Others	Total			
engaged with the college?	0	0	0	0			

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
UG	Male	701	93	0	0	794
	Female	460	23	0	0	483
	Others	0	0	0	0	0
PG	Male	14	2	0	0	16
	Female	13	1	0	0	14
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	9	1	0	0	10
	Female	3	0	0	0	3
	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	24	25	22	15
	Female	10	20	9	11
	Others	0	0	0	0
ST	Male	5	4	3	7
	Female	1	3	3	6
	Others	0	0	0	0
OBC	Male	119	143	147	152
	Female	79	86	108	91
	Others	0	0	0	0
General	Male	38	25	35	43
	Female	13	15	20	28
	Others	0	0	0	0
Others	Male	5	0	0	1
	Female	1	0	0	0
	Others	0	0	0	0
Total		295	321	347	354

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

ACS College of Engineering, a Self-financing, affiliated to Visvesvaraya Technological University (VTU) are proud to distinguish as an academic teaching institution and delivers a quality interdisciplinary & multidisciplinary engineering education in accordance with the curriculum framework by the VTU. Through this, the institution will imbibe VTU curriculum integration of essential subjects, skill and capacities, conceptual understanding, and emphasize integrative learning, critical thinking, and creative problem solving, life skills to the students. VTU has introduced many changes in the curriculum structure, teaching learning process, assessment procedures to stay relevant and

minimize the gap between Institution – Industry. VTU to fulfil the Multidisciplinary Aspiration of NEP 2020, along with Open Electives and Professional Electives, few courses on Arts, Law, Political Science, Geography, Music, Yoga, NSS, Physical Education, sports, Finance and Banking and Kannada literature are included as Ability Enhancement Courses (AEC). The Management of the institution in accordance to the AICTE. VTU and Government of Karnataka embraces the transformation as a continuous way and hence adopts the transformation to respond to new challenges to ensure better outcomes. The institution is well equipped of integrating the study of various academic disciplines suited to their life-long interests. The faculty in the institution has ability and enhances their knowledge to teach inter and multi-disciplinary subject to the students. The institution has adequate facilities for the students to prepare for graduate and professional study, for careers in new and emerging fields and also high competency level and confidence. The institution will focus on multidisciplinary 'cross-learning' for finding out the connection between different subjects.

2. Academic bank of credits (ABC):

The institution is proposing to drive for the autonomous status where the institution can register with Academic bank of credits. The Institution already in the process of encouraging the students to take MOOC's offered by premier institutions of the country to enhance their technical skills. The Institution will adopt these relevant online courses to appropriate programmes to enhance the student's skill competence and prepare for the eligibility to have the benefit of Academic Bank of credits in accordance with the VTU.

3. Skill development:

The students, faculty and staff of the institution need reskilling, as adoption of technology increases, according the curriculum change in the VTU and industry. The institution believes that the list of skills like critical thinking and problem solving in the next future years will grow in prominence. Newly emerging this year are skills in self-management such as active learning, resilience, stress tolerance and flexibility. The institution means to reskill and upskill the individuals in unprecedented numbers, to deploy precision safety nets and to create bespoke maps which orient the students towards the jobs of

tomorrow where they will be able to thrive. The institution has numerous functional MOU's with various companies, professional bodies and organization to develop the skill to fill gap between the industry and academia. The institution promotes the student and the faculty to learn a new skill set in an increasingly accessible through digital technologies.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

The institution encourages the students and faculty to learn the online courses offered by premier institutions of the country to enhance their skills. The institution shall adopt the NEP 2020, which envisions an educational system fashioned on the lines of India's profuse linguistic, cultural and artistic heritage. The promotion of Indian arts and culture is seen very important and it could be effectively imparted through integrating Indian culture into the main curriculum, which would not only develop a strong sense of identity and aesthetic outlook but also enhances creative and cognitive skills among the students. As the institution adhere the framework of VTU curriculum, the integration of Indian Knowledge system is integrated in the curriculum included as a mandatory credit courses such as Samskrutika Kannada / Balake Kannada (3rd /4th Semester), Constitution of India, Professional Ethics (4th / 3rd semester), Universal Human Values-II and A credit courses on NCC (5th and 6th semesters as elective courses).

5. Focus on Outcome based education (OBE):

VTU Regulations governing the UG and PG Degree are under outcome-based education and choice based credit system (CBCS). The institution strictly follows the guidelines and regulations of the VTU in the curriculum. The institution adheres the National Board of Accreditation norms to prepare the outcomebased education in PEO's, PSO and course outcomes. The institution aims to follows the outcomes-based educations are to: ? help formulate graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes that are expected to be demonstrated by the holder of a qualification; ? enable prospective students, parents, employers and others to understand the nature and level of learning outcomes (knowledge, skills, attitudes and values) or attributes a graduate of a programme should be capable of demonstrating on successful completion of the

Centres of the corporates offering general/specific technology driven online programs for the students as a part of reskilling strategies. ? To adopt the online courses of world class universities as a credit course to the students to understand the new knowledge in emerging areas. ? Employability skills offered to final year students to make the final year students for

employment ready.

programme of study; ? maintain national standards and international comparability of learning outcomes and academic standards to ensure global competitiveness, and to facilitate student/graduate mobility; and ? provide higher education institutions an important point of reference for designing teaching-learning strategies, assessing student learning levels, and periodic review of programmes and academic standards. 6. Distance education/online education: The institution in the strive to start the online education programme and to accomplish the eligibility criteria of University Grants Commission (Open and Distance Learning) Regulations, 2017 and University Grants Commission (Online Courses or Programmes) Regulations, 2018. The institution proposed plans for online education in the near future shall penetrate in in the following form: ? To offer skill-oriented programmes? To offer online academic programme as approved by the UGC/Distance Education Council? Education programme customized or generic programmes in emerging knowledge's to enhance the skills/knowledge? The Learning and Development

Extended Profile

1 Program

1.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
416	436	408	453	445

File Description	Document
Institutional data prescribed format	<u>View Document</u>

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
10	12	12	11	11

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1309	1198	1160	1117	1178

File Description	Document
Institutional data in prescribed format	View Document

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
124	150	138	138	98

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.3

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

2020-21	2019-20	2018-19	2017-18	2016-17
314	261	206	218	255

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
157	133	111	138	126

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
157	133	111	138	126

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 47

4.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
453.85	563.61	642.19	550.80	565.97

4.3

Number of Computers

Response: 618

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:

ACS College of Engineering is affiliated to the Visvesvaraya Technological University (VTU). The curriculum and the syllabus are defined by VTU for each course of the program, teaching hours and the evaluation methods. The institution conform well-planned procedure for implementing an efficient delivery of academic knowledge based on the curriculum set by the university. The University revises the curriculum and syllabus frequently to ensure that the topics of emerging / changing national and global trends are covered. The suggestions transmitted through the HOD's of our Institute to the University board of studies for necessary revision or comments.

The institution implements the curricular and co-curricular activities based on an academic calendar which gives a time bound activity plan for implementing various academic processes. Each department of the institution implements the departmental academic calendar which contains various activities such as internal assessments, value added courses, seminars/webinars and industrial visits based on the curriculum of the each semester. It also gives a guideline for the co curricular activity such as sports day and cultural fest of the institution. The departments further implement the timetable as per the semester requirements of the university syllabus. A detailed lesson plan is implemented by the individual staff members in their teacher's diary for the effective delivery of the syllabus. The institution well maintains the document as per the university procedures in the each department and office of the principal pertaining to the timetable, course file, calendar of events, HoDs minutes and the report of the various activities conducted.

Subsequently, the next step is the process of defining the Course Outcomes (COs) for every course and the mapping with the Program Outcomes (POs) as defined by NBA and the Program Specific Outcomes (PSOs) as defined by the program. The institution ensured that the CO-PO mapping of the various courses of the curriculum is such that every PO is addressed.

In general, the following action plans are implemented.

- Curriculum prescribed by the university is meticulously followed and is designed as per outcome based education.
- The scheme, subjects are allotted to the faculty based on their specialization and experience by the

Page 25/113 21-05-2022 06:58:21

Head of the departments well in advance and they are requested to submit the detailed course plan including the course outcome, its mapping with the program outcome, assessment schedule, assignment schedule and examination questions.

- Predefined institutional and academic calendar are provided to the faculty and students.
- Timetable is prepared and published well in advance. It also includes add on courses, seminars, workshops etc.
- The institution in regular basis conducts formative assessments to understand the leaning levels of the students, and to take measures to strengthen the same.
- The implementation of the curriculum is monitored through various means of meetings with Heads of the Departments, and the Principal at regular intervals. Apart from this, attainment of all the POs, PSOs and COs are discussed in HoD's meeting and IQAC Meeting to frame action items for the continual improvement of the elements of Outcome Based Education (OBE).

File Description	Document
Upload Additional information	<u>View Document</u>
Link for Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

The institution prepares the academic calendar in accordance with the Visvesvaraya Technological University calendar of events which includes the working days, holidays, internal assessments dates, practical exam dates, schedule of workshops, seminars, industrial visit, sports day, cultural day and the last working days of the semester and submitted to the principal for the approval of the Management.

The academic calendar of the institution is well planned and the same is displayed in the notice boards for the benefits of the students. The institution conducts internal assessments based on the procedure and regulations of VTU and as per the schedule of the academic calendar.

The following deliberate the compliance of Continuous Internal Evaluation with Academic Calendar:

- Academic Calendar: Principal's meeting with HODs and Faculty is conducted at the beginning of each semester. Regular meetings of HOD with members of the faculty are conducted to develop academic plans based on the number of available days.
- Class and Lab Time Table: Time Table Coordinator of each department prepares the time table as per the guidelines of VTU for the number of credit hours for each subject and the academic calendar prior to the beginning of the semester. Time Table is displayed on notice boards of every department. As far as laboratory classes as concerned, lab manuals are prepared for each laboratory and distributed to the students.

- Course Files and Lecture Plan: Each member of the faculty maintains the lesson plan and course file which are reviewed by the respective HOD and the Principal. Mentors ensure good attendance and class performance. Specific teaching strategies aids such as assignment, class test, quiz, group discussions etc are conducted which supports for the effective delivery and the betterment performance of the students throughout the semester. Industrial visits/Educational tours are conducted every year according to the syllabus of the course.
- Internal Examination: The internal tests are conducted generally after every 30 working days to monitor the progress of the students. Three internal assessments are conducted for each semester. The QP of Internal exam is prepared by faculties and is approved by the HoDs. The internal examination is evaluated with unbiased and transparent. In addition to the regular subject classes, the institution also organizes special lectures, workshops and seminars by inviting experts from various fields to share their knowledge and experiences with the students.
- Academic Monitoring: The HoD of the each department monitors on course coverage, student attendance and assignment for every subject. After each internal examination, results and the performance are discussed in class committees and department meetings to evaluate and remedial measures are then initiated to raise their academic performance. Parents are informed about the performance of students by phone, email etc., and parent- teacher meetings are convened during each semester.
- **Student Feedback:** At the academic end of each semester students submit the feedback for each subject through online feedback forms.
- In case of unseen conditions, academic calendar is modified and revised as per the instructions of the Principal only.

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
 - 1. Academic council/BoS of Affiliating university
 - 2. Setting of question papers for UG/PG programs
 - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
 - 4. Assessment /evaluation process of the affiliating University

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 10

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Link for Additional information	View Document

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 111

1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

2020-21	2019-20	2018-19	2017-18	2016-17
33	33	20	12	13

File Description	Document
List of Add on /Certificate programs	<u>View Document</u>
Link for Additional information	View Document

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

Response: 65.9

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

2020-21	2019-20	2018-19	2017-18	2016-17
1000	860	798	610	682

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

1.3 Curriculum Enrichment

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

Response:

The institution integrates the crosscutting issues of the society like Moral Values, Human Values, Professional Ethics, Ethical Values, Gender Equality, Environmental Awareness, which are inseparable part of the curriculum framed by the affiliating university VTU.

Orientation / Induction program for the first year is organized as an integral part of the curriculum which related to values and ethics

For instance, Environmental Awareness (18CIV59) is a mandatory subject for all students enrolled in the Bachelor of Engineering programme which unless and until students pass this course, their final grades are not awarded. Environmental issues are deliberated in depth in the classroom as part of a regular course called "Environmental Studies," which is taught in the classroom. There are chapters on topics such as the scope and nature of environmental science, natural resources, the eco-system, biodiversity, pollution, social and population issues included in the above-mentioned subject matter. The contemporary issue of environmental consciousness has been comprehensively handled by the institution, and sustainable development is given a great deal of attention in the curriculum and Solid Waste Management' by Civil Engg.; Green Computing by Computer Science Engg. and Information Science Engg.

The curriculum includes various courses to address Professional Ethics and Human values. For instance, Constitution of India & Professional Ethics is included to get equipped in the awareness and adhere to human values as well as professional ethics in their respective fields of study.

These curriculums provide free environment for inculcating values and developing ethical competence among the students. It is in response to a long- felt and urgent need to integrate value education with decision making skills in their personal, social and professional life.

Various departments of the institution organize talks on Human Values, with a particular emphasis on Gender Equality, Women's Empowerment, and Skill Development so its builds a better character and be a great part of the student's life to achieve great thing in the future. The teaching fraternities of the institution include the students in a variety of activities including Expert lectures, National Service Schemes, and National Community Colleges programmes towards community services.

The institution celebrates days of National and International importance as Republic day, Women's day, Independence Day, Teacher's day, Human Right Day, International Yoga Day etc. These celebrations nurture the moral, ethical and social values in the students.

The institution has Grievance Redressal Cell to provide counseling to students, promote gender equity among students and also deal with related issues of safety and security of female students, staff and faculty. The institution campus is secured with CCTV and security. There are separate Boys and Girls hostel for providing the safe environment to all students.

Till today, there have been no significant incidents of ragging or complaints from students concerning their harassment. As a result, the institution has made particular arrangements to address concerns like as gender equality, the environment, and other social challenges that are closely related.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document
Any additional information	View Document

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 4.96

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
32	21	22	16	15

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 50.73

1.3.3.1 Number of students undertaking project work/field work / internships

Response: 664

File Description	Document
List of programmes and number of students undertaking project work/field work//internships	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni

Response: A. All of the above

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

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1. Feedback collected, analysed and action taken and feedback available on website
- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected

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

File Description	Document
Upload any additional information	<u>View Document</u>
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 52.57

2.1.1.1 Number of students admitted year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
294	319	347	354	338

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
618	678	726	684	492

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 91.57

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

2020-21	2019-20	2018-19	2017-18	2016-17
104	146	124	124	95

File Description	Document
Average percentage of seats filled against seats reserved	View Document
Any additional information	<u>View Document</u>

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

The institution has a well-structured counseling / mentoring system to assess the learning levels of the student through the Induction / Orientation program organized by the institution for the fresher students. The institution analysis the student's learning ability in the initial stage based on class XII scores and the entrance test. Subsequent year, academic performance, level of attention, involvement in debates, and midsemester evaluations are adopted to make further judgments in later years of their studies. The Students are considered as Slow learners if they score marks below 50% of the total CIE marks, Assignment marks, and Semester End Examinations. The Students who have obtained marks more than 75% are considered as Advanced Learners.Mentors' observations play a vital role which gives the supplement of the individual observations of the student's.

The institution also orients the students the specific attributes that are expected of them apart from highlighting the various aspects of the institution:

Bridge Courses: For the students joining under the lateral entry system (diploma holders joining the second-year engineering course), the institution offers special coaching, bridge programmes and peer guidance in especially for Mathematics.

Remedial Classes: are conducted with an aim to improve the academic performance of the slow learners.

Classes for Arrear Students: The faculty identifies the Arrear students after the results obtained from University on the basis of performance. The mentors motivate the students to perform better. Extra coaching classes are provided by the concerned faculty members to enhance their academic performance.

Advanced Learners: are encouraged to participate and present papers in various Seminars/ Conferences/ Workshops/ Inter Collegiate Competitions. They are encouraged to participate in various inter collegiate co-curricular activities such as debates, Problem Solving, design competitions etc.Meritorious students from every semester in the respective departments are provided along with a certificate of merit. They are also encouraged to participate in a wide range of activities through student clubs/forums.

The Institution provides an opportunity for faculty to innovate in the TLP of the course and through on campus activities beyond curriculum, to encourage E-learning.For instance: E- Shikshana from VTU,NPTEL Swayam courses, Blended MOOCs with IIT, Open Ended Experiments in Lab courses, Value Added Programmes, Projects for Community Service by AICTE activity points, Live Lecture Programmes (IITM), Student project Exhibition and Awards for best student projects, Facilitating

Page 34/113 21-05-2022 06:58:21

Internships during the semester breaks, Project Based Learning, Innovation labs, Interdepartmental student projects, aim to motivate students to take up all types of Competitive Exams to encourage and guide students to pursue higher studies after their graduation and avenues available for them.

Slow Learners: The slow learners are identified based on performance during CIE (Continuous Internal Evaluation), assignments/tutorials and performance in the SEE (Semester End Examination). Special program in the form of remedial classes is arranged to improve the performance in the courses. The faculty advisory system (Mentoring) is introduced to help and motivate the students to improve their overall academic performance. The departmental Committee which constitutes HOD, and senior Professors also provides advice on academic matters.

File Description	Document
Past link for additional Information	<u>View Document</u>

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)		
Response: 8.34		
File Description Document		
Any additional information <u>View Document</u>		

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:

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

One of the major strength of our college is the teaching and learning process. Students receive a right blend of traditional and modern methods to make learning student centric and to give a rewarding experience. Experimental learning, participative learning and problem solving methodologies are adopted to ensure the overall development of students.

1. Experiential Learning

1.1 Students are encouraged to take up project work involving latest technologies and use of latest software. Different problems are investigated to a reasonable level by the final

year students under the guidance of project guides, within the time frame of the University.

- 1.2 For Real time exposure students are encouraged to participate in inter-collegiate and statelevel paper presentation and other competitions.
 - 1.3 Field visits and Surveys are arranged in academically significant areas.
- 1.4 Industrial visits are organized to academically significant industries to provide exposureto industrial work culture.
- 1.5 Guest lecture by eminent experts from industry and academics are organized to supplement the teaching process and provide experiential learning.

2. Participative Learning

- 2.1 Students are encouraged to participate in professional societal activities like IEEE, ISTE, IETE, etc.,
- 2.2 The college organizes activities to promote(i) the spirit of Team work through NSS camps,(ii) social responsibility through Red Cross, village Adoption, Tree plantation,

Swatchh Bharat and Health awareness camp, to help the students learn to lead life as a team for Social and community welfare.

- 2.3 Students are encouraged to take MOOCs (Massive Open Online Courses) offered by premier institutions of the country. They include online lectures, demonstration and interaction through web sessions.
- 2.4 Lab work and workshops are conducted as individual and group work under the supervision of the faculty members.

3. Problem solving Methodology

- 3.1 To develop logical thinking and practical knowledge among the students, case study method is adopted in teaching learning process. This will enhance problem solving ability.
- 3.2. All questions in the internal tests are based on analysis and reasoning. Free internet accessin the library and WI-FI facilities in campus promotes the habit of self-learning and discussion.
 - 3.3 Assignments and Quizzes are given at the end of each unit.
- 3.4 Students are involved in the Research activities, product design and development conducted in each Department underthe guidance of research scholars, to get knowledge about emerging area and help them to develop research orientation.

File Description	Document
Upload any additional information	<u>View Document</u>
Link for additional information	View Document

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

2.3.2 TEACHERS USE ICT ENABLED TOOLS FOR EFFECTIVE TEACHING- LEARNING PROCESS:

ACSCE, has adequate resources which include wide availability of computers in Engineering departments and library, high speed internet access, ICT enabled class rooms, smart classrooms. General ICT awareness among students and faculty members is good and all the faculty members are capable of using the ICT very effectively. The faculty membersuse various ICT enabled tools to enhance the quality of teaching-learning like,

- 1.Google classroom is used to manage and post course related information- learning material, quizzes, lab submissions and evaluations, assignments, etc.
- 2. Virtual labs are used to conduct labs through simulations.
- 3. Online drawing tools like concept maps, mind maps, are used to perform student centric activities.
- 4. The PPTs are enabled with animations and simulations to improve the effectiveness of the teaching
 - learning process.
- 5. The online learning environments are designed to train students in open problem-solving activity.
- 6. Lab manuals are mailed to students well in advance the experiment is performed.
- 7. Online quizzes and polls are regularly conducted to record the feedback of the students.
- 8. To teach mathematical subjects in online mode, teachers have used various online tools likewhiteboard in Microsoft teams, Jamboard in Google meet, etc

ICT tools complete the traditional teaching – learning methods, and institution encourages innovative methods for enriching the learning experience.

ICT enables teaching-learning process is supported with regular practical sessions, access digital library, online courses (MOOC, NPTEL, etc.,), online journals, online test, use of LCD projectors for seminars and workshops, productive use of educational videos.

ICT has helped to improve the communication skills of the students and thereby acquire proficiency in listening, speaking, reading and writing skills.

ICT Tools and Resources available:

Google Sites - Google Docs, Google Sheets, Google Slides, Google Drawings, Google Forms, and Google Keep, Google Classroom, Plickers, Screencast-o-matic, thinklink,

E-Resources and Techniques Used:

NPTEL, Library e-book / Journal, Springer online e-Journal, ASME online e-Journals, ProQuest, Edx.org.

File Description	Document
Upload any additional information	View Document
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 15.77

2.3.3.1 Number of mentors

Response: 83

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	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: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 24.61

2.4.2.1 Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
38	33	29	30	33

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 3.27

2.4.3.1 Total experience of full-time teachers

Response: 514

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

The institution will follow the norms stipulated in the Continuous Internal Evaluation Procedure of VTU as on prevailing date. The rules and regulations governing the assessment and evaluation process are conveyed to the students through copies of the syllabus that are delivered to them at the beginning of the first year of their degree course in which they are enrolled. The internal assessment is carried out in a systematic manner for theory courses, laboratory courses, seminars, summer internship and project.

The academic calendar is prepared by the faculty in advance and approved by Principal pertaining to internal assessment will be communicated to students at the commencement of the semester.

Faculty IA coordinator of the concerned department will prepare the Timetable, Circular, arrangement of seats and Invigilator schedule for the Internal Test. As per the Test Timetable dates schedules, room allocationwill be displayed on the Notice board (Classroom & Department). After the internal Test conducted the faculty will discuss the scheme, solutions and the evaluated answer scripts will be distributed in the class. Sessional result is discussed at HoD Level and a comparative evaluation of student's performance is carried out on the internal assessment marks to prepare and guide the students for better performance in the University external examinations.

As per the guidelines of the University, three Assignments mandatory but for any improvement of the marks the student shall be given additional assignment for each subject and accordingly marks will be awarded. All the Internal Assessment Test Marks conducted will be communicated to the parents through ACS College ERP Software. The Institution also conducts a student feedback process of every semester to improve Teaching, Infrastructure, and the learning xperience for the students during their tenure. The Student's feedback is considered as a valuable source of information to measure their level of satisfaction. Parents are invited at least once in a semester to discuss the progress of their wards. This is in addition to the regular monitoring of the student's progress by their faculty mentors. The faculty mentor regularly interacts with the assigned students to monitor and improve the progress of each student and the same is communicated to the parents.

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

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient

Response:

Each department has an examination coordinators and non teaching staff to conduct smooth condition of internal examination. Comprising of a senior faculty member as Deputy Chief Superintendent (internal), other teaching and non teaching staff are constituted to conduct the external University examination smoothly. The institution adheres strictly the guidelines and rules by the VTU while conducting the internal and external examination.

As per the VTU regulations, the student should score 60% marks in Examination,40% marks in Internal Test conducted by the institution for theory and Laboratory. The Test marks will be communicated to students and parents through ERP by college.

21-05-2022 06:58:21

If any marks discrepancies, the students shall contact the respective faculty member and rectify accordingly.

Interacting with mentors:

The faculty member serves as a mentor to between 15 and 20 students at a time. Once a month, the mentors get together for a mentoring meeting. There is a weekly M/L/S term (Mentoring/Library/Seminar) that has its own timetable that is assigned to each student. As a result, the students meet with their mentor and have the opportunity to express their concerns and their feedback is given to the department's chairperson for consideration.

Class Committee Meetings

Class committee meetings are held three times per semester, and they are attended by the chairperson, the theory and laboratory teachers, and students representing more than 10% of the class as well as other students. This meeting is entirely focused on the needs of the students and encourage to submit complaints to the chairperson and other members of the committee.

Suggestion Box

Suggestion Boxes are distributed throughout the institute at each departmental location. Students can place clues in the box in the shape of letters. Principals and heads of departments might conduct routine audits to ensure that the same is being followed.

Parental minutes

The parents of the student meet with the teacher and the department's head to discuss their child's progress. Student grievances are then forwarded to higher authorities by way of their parents or guardians. Students and parents should be aware of the telephone number of the department's head of department.

During the Principal meeting, all grievances of any of the types listed above are collected and discussed in detail. The recommendations made by the members of the assembly are reviewed; corrective solutions are debated and desired, with the goal of transferring them to management in the same way. Following this conversation, appropriate action will be done starting the following day or at the next event, depending on the demand, to meet the needs of the participants.

University Level

The grievances in the University examination question paper, syllabus coverage etc. will be taken care and communicated to the university through the Head of the Institution.

Students request photocopies of graded response scripts and submit an application to the university for revaluation of the end-of-semester examination.. Students can request a revaluation of their answer scripts after they have received their answers and have them evaluated by a teacher

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

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

All the departments of the institution adopts the Programme outcome (PO) defined by National Board of Accreditation (NBA), New Delhi and are to be fulfilled by all the programs in higher education. Hence, the Program Specific outcomes are defined by each department and are in lined with the vision and mission of the institution and department as well as the graduate attributes.

The CourseOutcomes (COs) for each subject is well defined in the syllabus or defined by concernedfaculty member in consultation with senior faculty teaching the same subject and HoD. The POs, PEOs, and PSOs and COs are available on Institutionwebsite and are also communicated to students, teachers and other staff by displaying at following places:

Institution Website (www.acsce.edu.in)

Classrooms

Laboratories

Department Notice Board

HOD Chamber
Department Library
Department Newsletter
Laboratory Manuals.
Course Outcomes(CO's) of the course in the respective program are published in
Course Delivery Plan
Respective Class rooms
IA Test paper
Course materials
Admission Brochures
The COs is circulated to students through faculty announcements during the commencement of each semester and from time to time during the entire duration of the semester
Course Outcomes (COs) are defined for every course, and are statements that describe the competenciesgained by the student through the course. Every CO is aligned to one or more POs, and is measured at theend of the course, through various assessments, designed specifically to effectively measure the CO and contribute to the PO that it is mapped to. The number of COs for a course is not fixed, and may have aboutsix COs.
When COs are well defined, the CO-PO mapping becomes redundant, as one can map the CO to the PO through comprehending the essence of the CO. However, the strength of the mapping is dependent on the course instructor and this component, necessitates the need to have the CO-PO mapping together with its strength.
Syllabus: All courses of the curriculum have well defined COs, the CO-PO mapping with its strength and is included in the syllabus. The hardcopy of the syllabus is made available to every student.

Website:

The syllabus of all programs offered by the department is uploaded on the institutional website, which includes the COs of various courses of the curriculum.

Course handout:

The course handouts for every program includes Vision-Mission, PEOs, POs, PSOs of the Program offeredby the department and COs of various courses of the Curriculum

Library:

Institute's central library keeps all the POs, PSOs and COs for easy access to students and faculty throughthe syllabus books of various programs.

Lab Manual:

All POs, PSOs and COs of specific lab course are printed on lab manuals and issued to all students at the commencement of every semester.

Course Files:

All the faculty members will prepare a course file for each semester that lists the POs, PSOs and COs.

File Description	Document	
Upload COs for all Programmes (exemplars from Glossary)	View Document	
Upload any additional information	<u>View Document</u>	
Past link for Additional information	View Document	

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

COs attainment:

Attainment of course outcomes for each course is measuredbased on the following assessment process:

Step 1: The faculty uses the course outcomes of the respective course available in the course in the evaluation scheme, else prepared by respective faculty, and verified by the respective HoDs.

- **Step 2:** As the percentage of marks (related to each COs) asked in university exam(external exam) and internal exam, the average weightage percent of each CO is measured as an average of external/internal exams for further calculation of direct attainment.
- **Step 3:** Weightage of external and internal examinations marks were distributed based on totalmarks as per the university curriculum. The class average in respective (External and Internal) examinations was used for further calculation of CO attainment.
- **Step 4:** The Attainment level of CO is measured through syllabus by Direct Assessment Process (DAP) with weightage of (80%) and Indirect Assessment Process (IAP) with weightage of (20%). The DAP is measured into two assessment processes, namely Internal Assessment (IA) with weightage of 30% and External Examination with weightage of 70%. In IA, the assessment tools are Internal Assessment Test (IAT) and Assignment. The weightage of these tools are segregated and recorded by the faculty who handsthesubject.In Indirect Assessment process, the University Semester End Examination and course end survey is used as an assessment tool.

The Departments have developed the curriculum taking all the POs into consideration and assuring that the curriculum strongly maps to all the POs. The PSOs are also appropriately framed along with the curriculum development.

The COs are framed as the abilities of the student after completing the course. The framed COs are thenmapped with the POs and the PSOs. During the CO-PO/PSO mapping, the strength of mapping is also considered.

Internal Assessment is conducted as per the university academic schedule and student'sperformance of marks is recorded. At the end of course, course end survey is taken from the respective course students and the values are recorded. The student's performance of the university exam is recorded. In IAT, attainment is measured in terms of actual percentage of students getting the percentage of marks, which is set for the respective courses. In university exam, attainment is measured in terms of actual percentage of studentsgetting pass marks, fixed by the university.

The CO target level is initialized based on previous university exam results of the respective courses. If the target value is attained, the value for next batch is increased by 0.1 from attained value to maximum level of 3. If not, the same value is maintained for the next year.

At the end of the programme, the POs/PSOs are computed using the CO computation value of all the Costhat are mapped to a PO/PSO and through Exit Survey. The PO/PSO computation are done using the weighted average of all the COs that are mapped to that PO/PSO. The Exit survey questions are framed by

the department to indirectly measure the POs/PSOs.

File Description	Document	
Upload any additional information	View Document	
Paste link for Additional information	View Document	

2.6.3 Average pass percentage of Students during last five years

Response: 93.94

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
314	261	206	219	255

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
342	276	216	230	275

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Paste link for the annual report	<u>View Document</u>

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.62

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 88.57

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
44.96047	16.5852163	11.611000	5.69000	9.725

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document
Any additional information	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 13.38

3.1.2.1 Number of teachers recognized as research guides

Response: 21

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	
Any additional information	View Document	

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 75

3.1.3.1 Number of departments having Research projects funded by government and nongovernment agencies during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
7	6	4	5	5

3.1.3.2 Number of departments offering academic programes

2020-21	2019-20	2018-19	2017-18	2016-17
7	7	7	8	7

File Description	Document	
Supporting document from Funding Agency	<u>View Document</u>	
List of research projects and funding details	<u>View Document</u>	
Any additional information	View Document	
Paste link to funding agency website	View Document	

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

ACS College of Engineering (ACSCE) has created innovation ecosystem for faculty and students with the support of institutions innovation council (IIC) and Pongu Ventures Pvt.Ltd. ACSCE established institution's innovation council under the guidance of AICTE and Ministry of Education (MOE), Govt. of India to systematically foster the culture of innovation at the institution The primary objective of ACS innovation council is to encourage, inspire and take care of young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. ACSCE IIC signed MOU with Pongu Ventures to envision creation and promote innovation in the institution through countless modes leading to an innovation promotion eco-system in the campus. ACS innovation council is doing monthly activity related to innovation entrepreneurship

and startups with external experts and startup ecosystem enabler. ACS College of Engineering has established as "Rajarajeswari Business Incubator" (RRBI) to help young startups innovate and grow. The institution provides workspaces, mentorship, education and access to investors for startups or sole entrepreneurs. In addition, RRBI also provides financial and management support to compete successfully with established industry persons.

ACS IIC organizes periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals

Page 49/113 21-05-2022 06:58:21

and creates a mentor pool for student innovators. Also conducts various innovation and entrepreneurshiprelated activities. This creates an Innovation portal to highlight innovative projects carried out by institution's faculty and students.

About Innovation Council:

ACS College of Engineering established Institution's Innovation Council (IIC) under the guidance of AICTE and Ministry of Education (MOE), Govt. of India to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The primary objective of Innovation Council is to encourage, inspire and take care of young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. MIC has envisioned encouraging creation of Institution's Innovation Council (IICs) across selected HEIs. A network of these IICs will be established to promote innovation in the Institution through countless modes leading to an innovation promotion ecosystem in the campus.

Functions of IICs

To organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators.

To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bound fashion.

Identify and reward innovations and share success stories.

Network with peers and national entrepreneurship development organizations.

Create an Institution's Innovation portal to highlight innovative projects carried out by

institution's faculty and students.

Organize Hackathons, idea competition, mini-challenges etc. with the involvement of

industries.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 18

3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
6	5	2	1	4

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

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 3.19

3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Response: 67

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

Response: 21

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

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

Response: 1.69

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

2020-21	2019-20	2018-19	2017-18	2016-17
53	43	43	36	50

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

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

Response: 1.26

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

2020-21	2019-20	2018-19	2017-18	2016-17
35	22	36	51	24

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

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

In line with the vision and mission, the institution is very insightful to the effect of various extension activities on its students, employees, as well as on the regional community and the environment. The institution considers in giving back to the neighborhood community. The various social and technical activities organized by the institution reflect our commitment to operate in a techno-social responsible way.

The institution frequently organizes and participates in various extension activities with the aim to sensitize about various social issues to the students and strengthen in contributing to the community. The institution under NSS Unit carries out these activities. NSS was started in the

year 2016 which has been recognized by VTU, organizes several activities in the institution. Various activities like Blood donation camp, Plantation of trees, Cleanliness of the surrounding areas of the institution, COVID-19-Vaccination Drive, Special camp, Ecosystem Restoration,

Swacch Bharat Abhiyana and Say No to Crackers etc. During pandemic, our institution has conducted few awareness programs nearby government school for children to keep themselves safe and neat by explaining about 3 magic words "SANITISE"

MASK SOCIAL DISTANCING".

Students of the institution actively participated in the activities in NSS; the students were made to realize the importance of cleanliness, pollution control, saving of water etc. These could be made as there internship projects subjects. Students could also educate their family with respect

to the above fields. The impact of COVID on students was the realization of the technology in education system.

The National Voter's Day was absorbed in the college which gave awareness to the students, the right to vote, whom to vote, why to vote etc., as the youths are the future leaders of the nation. In Aeronautical Engineering the extension activities such as skill training on modern testing

equipments for supporting staff, basic RC plane aero modelling training for school students, Internship and job training at reputed industries.

Through Internship and Job training our students are getting benefited practical skills, experience and greater knowledge of an industry, in exchange for the employer benefiting from the industry.

This will help students to aware real-life experience of the workplace and holistic development. The institution motivates the faculty members and students to participate in need-based, participatory initiatives with local communities, and that category from health, sanitation, education, womens empowerment etc. The institution also promotes regular engagement of faculty members, students and staff with neighborhood community for their and sustained community development through various activities. The impact and sensitization are as exposure to extension and outreach activities sensitize the students towards social issues and also to legal and social remedies for various matters. The

activities conducted imbibe the values of social responsibility such as to help people in need and distress, to promote cleanliness in all span of life and common places, to acquire social values and a deep interest in environmental related issues, to understand societal/rural problems and

provide solutions through projects and to develop lifelong skills such as communication, management, leadership, analytical and perceptual etc.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

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

Response: 20

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

2020-21	2019-20	2018-19	2017-18	2016-17
6	3	5	3	3

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document
Any additional information	<u>View Document</u>

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 47

3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
20	08	7	04	8

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	<u>View Document</u>

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 59.44

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
953	583	668	563	798

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	<u>View Document</u>

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year

Response: 161

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
79	40	34	4	4

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 59

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

2020-21	2019-20	2018-19	2017-18	2016-17
18	14	10	9	8

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	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 infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

Response:

ACS College of Engineering has adequate infrastructural facilities for effective teaching-learning process, extra-curricular and co-curricular activities to fulfill the norms laid by the AICTE, VTU and Government of Karnataka. The institution is located in a beautiful lush green landscape, free from polluted environment and excellent atmosphere and ambience ideally suited for growth of the soul & mind. The existing infrastructure facilities are enhanced based on the requirements of students and faculty member to support for their teaching learning process, research and development activities

The institution physical infrastructure consists of 38 classrooms, 42 laboratories, smart classrooms, 05 seminar halls, rest rooms and 12 common rooms. Subsequently, the institution has supporting academic and administrative rooms. The institution has adequate ventilated classrooms and illumination, and is equipped with ICT tools like portable projector, internet connectivity. Each department has well equipped Laboratories, Seminar halls and Department Library. The existing physical infrastructure is preferably utilize beyond regular institute hours, to co/extra-curricular activities, campus recruitments, meetings, seminar, conferences etc. Each faculty of the institution have well-furnished separate cabins with the optimistic ambience for interaction with the students who come for guidance, counseling and discussions.

The institution has laboratories in accordance with the AICTE norms and VTU curriculum. ACSCE has 42 laboratories with state of art laboratory equipment. The labs are well equipped with safety norms with list of experiments details. Labs are used by the students beyond the working hours for doing their projects. Also the institution has established UC Berkeley and Intel intelligent System laboratory to bridge the gap between industry and academics.

The management consistently interacts with the stakeholders to improve the infrastructure facilities. Apart from the books available in the library, students can also access online E-resources such as digital library to widen their knowledge and skills. The students can refer the Project report maintained at Library for further reference and other development usage. All the classrooms, smart classrooms and seminar halls are well equipped with ICT facilities. Computer laboratories are installed with licensed software as well open source software. The student computer ratios are maintained in accordance with AICTE. The institution is equipped with Wi-Fi, hot spots and Internet facility with a bandwidth of 100 Mbps.

Page 57/113 21-05-2022 06:58:21

The institution has Innovative cell, an Incubation centers aim at training the students in various advanced technologies. The institute also has Research & Development (R&D), Start up and Entrepreneurship development centers (EDC). ACSCE has separate hostel for boys and girls in the campus. The institutional Placement and Training cell has adequate infrastructure to conduct various activities with regard to the training and placement for the students.

ERP software of the institution is deployed for effective automation of academic and administrative process used in the institution, to maintain and analyse the data related to various process of the institution.

For the physical disabled students, the institution has ramp, wheel chair, lift and washroom with necessary facilities.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

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

Response:

Response:

1. Sports, Games (Indoor, Outdoor) Gymnasium, Yoga Centre

The Management has constantly encouraged and supported for the co-curricular and extracurricular activities of the institution. The institution has also carried forward the bequest of society by supporting the co-curricular and extracurricular at their level. The institution aims to create that every student to become model citizens of the nation not only in academically fit but also physically fit to face the challenges of the real world.

In this aspect, the institution has following outdoor and indoor sports and cultural facilities:

- The institution has a vast playground facility inclusive of cricket ground, volleyball ground, football ground, basketball ground etc.
- Well established Indoor games courts and halls to promote the sports and yoga classes activities.

· Well-equipped auditorium to conduct the cultural events

The institution encourages and allows the students to participate in the competitions at University, State, Intra colligate sports and cultural competitions. The students who represent the institution in various sports and cultural events the management provides with necessary materials and paid TA / DA. The student's achievements are acknowledged by felicitating in the institute level functions.

The institution also conducts events such as Chairman Trophy Tournaments, inter colligate sports and cultural competitions. The institute prepares separate budget for organization of various sports and cultural events. RRMCH supports the students and staffs for any medical emergency and provides ambulance / vehicle available for the medical emergency.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	<u>View Document</u>	

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 89.36

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 42

File Description	Document	
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document	
Paste link for additional information	View Document	

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 21.66

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
127.67	35.55	165.63	156.44	111.43

File Description	Document	
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document	
Upload audited utilization statements	View Document	
Upload 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:

ACS College of Engineering using the New Gen Lib 3.0 from 2011. Library is partially automated with the System for Library management system (LMS) having version of 3.0. Library collection can be track / searched on Intranet using the modules. It helps for cataloged the books borrowed, document searchers on various fields like Author, Title, Year of Publication, Publisher, patrons and many more. Our library has unique rare book collections which help both staffs and students to get curies and also motivated over the topics under that title.

An ILS usually comprises a relational database, software to interact with that database, and two graphical user interfaces (patrons & staff). Most of the ILS/LMSs software functions intro discrete programs called modules, each of them integrated with a unified interface. Those are; Acquisitions (ordering, receiving, and invoicing materials), Technical Processing or Cataloguing (classifying and indexing of materials), Circulation (lending materials to patrons and receiving back), Serial Management (Journals), MIS Reports (Online Public Access Catalog/Public (Backend Reports), OPAC User Interface) and Administration/Library Management.

Management System as a "software system that enables users to define, create, maintain and control access to the database". The core functionality of management system is the storage, retrieval and update of data. Management systems functions & service such as Data storage, retrieval and update, User accessible catalog or data dictionary describing the metadata, Support for transactions and concurrency, Facilities for recovering the database should it become damaged, Access support from remote locations, enforcing constraints to ensure data in the database abides by certain rules. The features of the ILMS software are functional modules are completely web based. Uses Java Web StartTM Technology. The Compatibility – Complies with international metadata and interoperability standards: MARC-21, MARC-XML, z39.50, SRU/W, OAI-PMH, uses chiefly open source components, scalable, manageable and efficient, OS independent – Windows and Linux flavours available, Z39.50 Client for federated searching, Internationalized application (11 8N), Unicode 4.0 complaint, Easily extensible to support other languages, Data entry, storage, retrieval in any (Unicode 3.0) language, RFID integration: Book Tags, Gate Antennas,

Work Station, Handheld Reader, Self-KIOSK., Networking – Hierarchical and Distributed networks.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	<u>View Document</u>
Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership, Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 13.88

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
14.88	14.74	12.93	13.77	13.09

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 5.93

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 87

File Description	Document	
Details of library usage by teachers and students	View Document	

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

At the present era, digital communication plays a vital role in the teaching learning process. ACS College of Engineering accomplish the norms of the AICTE and University, the institution has very well equipped IT infrastructure. The institution facilities such as Internet Facilities through leased line and Wi-Fi for providing continuous and uninterrupted internet connectivity to students and faculty members. These facilities are available to faculty members and students for research, academic and consultancy support. The classrooms are well equipped with the LCD projectors and Wi-Fi connectivity. The campus has been surveillance with CCTV cameras installed in the strategic places.

The entire campus including Boys and Girls hostel is Wi-Fi enabled and students can access the internet on their laptops round the clock. In each department there is a smart class room which is utilized for edusat classes as per the given timetable by EDUSAT. All laboratories are very well equipped with updated systems.

The institute has massive network of 618 computers with 100 Mbps fiber optic internet connectivity along with standby 20 Mbps backup link and Wi-Fi facility with public and private connectivity. Centralized

firewall "Mikrotik Router" is used for internet security and "Radius Manager" used for network monitoring and management. All the laboratories on each floor contains 24 port 10/100 L2 switch. All floors and computer laboratories are connected in Star topology and 100 Mbps bandwidth is shared in LAN. Uninterrupted power supply (UPS) is available in all computer laboratories.

Latest copyrighted software for system software such as windows 10 and Application Software such as Oracle 9i, Turbo C, Microsoft Office, Stadd Pro, SQLCAL, K7 and Microsoft applications. Open Source software system software such as Ubuntu 14.04 LTS and Application Software such as Anaconda 19, ANSYS CFD, MATLAB, GIS, AutoCAD, Solid edge, Catia and Android Studio are available in laboratories. The institution has language lab to enhance the English communication skills of students. Language lab software comprises of the interactive instructor and student module, lesson composer and integrated study material. The institution uses zoom and Microsoft team's software for conduction of online classes and meetings.

Enterprise Resource Planning (ERP) of the institution is utilized for effective academic planning, execution, monitoring and analysis. ERP software is utilized for automation of academic and administrative processes by the institution, to maintain and analyze the data related to various process of the institution. This ERP software has numerous modules and facilitates computerized processes for student's admission, leave management, attendance and academic monitoring, student's feedback etc.

The institution has sufficient servers available for smooth conduction of various activities such as online examination, webinars, online workshops, virtual lab, hosting copyrighted software etc. The faculties are provided with computers with internet connection at their respective places. The institution has centralized maintenance system to support the IT infrastructure, campus facilities and equipment's. All the IT facilities are intermittently updated, Details of Auditorium, Camera, PAS, Digital Display Board, ERP & Website invoice are uploaded.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	View Document	

4.3.2 Student - Computer ratio (Data for the latest completed academic year)		
Response: 2.12		
File Description Document		
Student – computer ratio <u>View Document</u>		

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 72.21

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

2020-21	2019-20	2018-19	2017-18	2016-17
285.19	500.07	443.12	362.88	422.2

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	<u>View Document</u>

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:

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.

The institution has the Estate officer with a team of members and Block In-Charges monitor the maintenance and cleanliness of the buildings, classrooms, laboratories, furniture, sports ground, sports facilities, student's amenity areas, canteen and hostel buildings.

The Common Utilities maintenance schedule is given below:

S. No.	Name Of Common Utility	Proposed Maintenance Schedule	Department	
			In-charge	
Electrical	Maintenance			
1.	Air Conditioner	3 Months	Mechanical	
2.	Audio Amplifier / Speaker / Cable	Monthly	ECE	
3.	Intercom	Monthly	AERO	
4.	UPS / Invertor / Battery	3 Months	CSE/Electrician	
5.	Fan / Light / Switch Board	Monthly	Electrician	
6.	LIFT / Elevator	Monthly	CIVIL	
7.	Lab - Distilled Water Unit	Monthly	AEROSPACE	
8.	Black Board / Chalk Stand	6 Months	BME	
9.	Water Purifier Unit	Monthly	Electrician	
Furniture	e Maintenance			
10.	Windows / Doors / Window Screen	Monthly	Block In-Charge	
11.	Class Room Dias	3 Months	Block In-Charge	
12.	Drawing Table / Steel Stools	6 Months	Block In-Charge	

Desk / Table / Chairs Wooden Box / First Aid Box/Keybox Stand S type Chairs / Rolling Chair	6 Months ard6 months	Block In-Charg Block In-Charg
Stand	ard6 months	Block In-Charg
S type Chairs / Rolling Chair		
	6 Months	Block In-Charg
Rest Room Tap / Wash Basin /Lab Wa Tap	terMonthly	Block In-Charg
Hydraulic Door Stopper	Monthly	Block In-Charg
Normal Door Stopper	Monthly	Block In-Charg
CCTV Camera	Fortnight	CSE
enance		
1 1	and3 Months	CSE
Projector / Screen	Monthly	ECE
ture Maintenance		
Floor Cleaning / Dust Bin	Daily	Department
Lab Cupboard / Steel BureauDrawer	6 Months	Department
Lab Cupboard / Steel BureauDrawer	6 Months	Department
	Hydraulic Door Stopper Normal Door Stopper CCTV Camera Laptop /Desktop / OS / Printera Antivirus Checking Projector / Screen	Hydraulic Door Stopper Monthly Normal Door Stopper Monthly nance CCTV Camera Fortnight Laptop /Desktop / OS / Printerand3 Months Antivirus Checking Projector / Screen Monthly

25.	Wall clock	Monthly	Department
26.	Floor Tiles	6 Months	Estate Officer
27.	Fire Extinguisher	6 Months	Estate Officer
28.	Window Screen(Wash)	6 Months	Estate Officer
29.	Reading Table, System Table,Bo Shelves Cleaning	ookWeekly	Librarian
30.	RO Plant	Daily	Estate Officer
31.	Class Room Cleaning	3 Days Once	Department
32.	Lab Cleaning	Weekly	Department
33.	First Aid Box	Monthly	Estate Officer
34.	Medical Facility	Monthly	Estate Officer
35.	Differently Abled Facility	3 Months	Estate Officer

Maintenance Schedule of Common Utilities Maintenance of Classrooms, Furniture and Laboratories

The institution classrooms with furniture, teaching aids and laboratories are given incharge by the respective department staff and technical staff and supervised by the Respective block In-charge. Respective block In-charge report to Head of the department and then to the estate officer and then to the Administrative officer periodically for all the maintenance works.

Maintenance of library

The institution and the librarian ensures Orderly stacking of books in the library and effectively support team for easy accessioning of books. The library staffs are clearly instructed in the care and handling of library documents. Books movements register and student's entry register is maintained using the software. Books needs to be borrowed using their own identity card. The institutional library rules for issue of books to the under-graduate student is 3 books and 5 books for post-Graduate student with borrowing period of 15 days, if any renewal is requested by the staff or student is allowed, if there is no demand for the same book, from other readers. Any late submission of books, a minimum overdue charge collected from the students.

Maintenance of Electrical Appliances

The institution has three Electricians who extend their service to all the departments to ensure optimal utilization of electrical appliances. Notified problems are reported to respective in-charge of common utilities and same will be reported to Administrative Officer through HoD. Administrative officer supervises with electricians for rectification.

Maintenance of Computers, Internet and Networking Facilities

The institution has System Administrator and support team to ensure the maintenance of ICT facilities including computers and servers, internet and networking. The maintenance includes the required software installation, antivirus and Campus Wi-Fi facility. A maintenance register is maintained by each computer centre and respective laboratories. Any issues related to Computers, Servers, Printers, Networking and System security identified by students/Lab Technicians are reported to system administrator through HOD, and the support team will rectify the issues.

Maintenance of Lab Equipment

The respective Staff In charge and Lab Technicians of the respective department are given responsibility to maintain the equipment. Stock registers, maintained by the respective laboratories to report entries and defects arising for rectification. Repair if any, are reported to the Head of Department or the faculty-in charge and suitable measures are taken for speedy functioning of the equipment.

Any equipment's required for major service is informed to company, in case it is under warranty. If warranty void, the service quotations are prepared by respective lab in-charge and submitted to administrative officer for further approval of renewal.

Maintenance of Sports and Games Facility

Sports facilities provided by the institution: The institution owns a football ground, Basket ball court, Volley ball court. Sports grounds are maintained frequently by ground staff under the supervision of

Physical Educational director.

The institution also shares the Cricket ground with RRMCH and the ground is maintained by Karnataka State Cricket academy (KSCA). Seasonal maintenance of all equipment and ground are carried out regularly by the Physical Education director. Gymnasium and playgrounds are maintained by the staff of the Department of Physical Education. Any equipment's required for major service is informed to company, in case it is under warranty. If warranty void, the service quotations are prepared by respective Physical Education director and submitted to administrative officer for further approval and sanctioning.

Maintenance of Transport Facility: Estate officer is the In-Charge for all the buses and other vehicles of the institution. In case of any maintenance, it is reported to administrative officer for further approval and sanctioning of fund.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	<u>View Document</u>	

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 last five years

Response: 47.63

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
738	567	587	511	449

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 5.33

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
37	50	79	80	67

File Description	Document
Upload any additional information	<u>View Document</u>
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	View Document

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 66.39

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

2020-21	2019-20	2018-19	2017-18	2016-17
1000	590	798	745	834

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document

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

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Upload any additional information	View 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

5.2 Student Progression

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

Response: 54.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
140	169	112	121	132

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 21.66

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 68

Page 72/113 21-05-2022 06:58:21

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 85.85

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
13	17	6	10	12

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
15	20	9	11	12

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document

5.3 Student Participation and Activities

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

Response: 41

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

2020-21	2019-20	2018-19	2017-18	2016-17
3	9	12	13	4

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

5.3.2 Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

At the commencement of the semester, the institution has a practice of identifying class representatives for each class and nominates them to the student council. The members from this council are adopted for different administrative bodies. The council is responsible for conduct of many activities in the campus including curricular, co-curricular and extracurricular activities. The activities of the council would be supported by the participation of all the faculty members. The management of the institution meets the required funding for conduct of such events.

The events and functions organized by various committees under the Student Council as follows:

- 1. Students Council: The institution adhere the norms laid by the competent authority for the Constitution of the Student council committee and this council established every year for performing prescribed duties.
- 2. Anti-Ragging committee: This committee ensures that zero ragging incidents in the institution and spread awareness among students against any ragging activities through displaying pamphlets of anti-ragging, observation anti ragging in the campus including hostel.
- 3. Cultural committee: Conducting cultural events, facilitating student participation in other institutions at state/interstate level.
- 4. Sports: This committee conducts sports events, facilitating student participation in other

Page 74/113 21-05-2022 06:58:22

- institutions at state/interstate level.
- 5. Student Welfare committee: This committee encompasses facilities that promote the physical, mental and social wellbeing of pupils and students.
- 6. Professional/NSS committee: Conducting ISTE sponsored programmes, to give a personality boost with the help of selfless social work with student personality.
- 7. Magazine committee: The committee initiate action plan to publish from ACSCE.
- 8. Grievances redressal committee: The committee aims to look into the complaints lodged by any student and redress it as per requirement. The committee will adopt the policy guidelines as envisaged in AICTE, UGC, VTU and Government of Karnataka as applicable from time to time
- 9. Sexual Harassment Elimination committee: The committee assures all the complaints of the students, teaching and non-teaching staffs are treated with dignity and respect and the complaints should be maintained confidential

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 7.2

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2	5	8	9	12

File Description	Document
Upload any additional information	View Document
Report of the event	<u>View Document</u>
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The Alumni Association of the institution was established in the academic year 2014-15, registered under Jayanagar under Karnataka Society Registration Act on Friday 26th September 2014 and registration ID: JNR-S222-2014-15. An alumni association is an association of graduates.

ACS College of Engineering Alumni Association makes the professional structure, which helps the alumni to get associated with each other. This worldwide stage of alumni association acts as a platform for all the alumni members by establishing their inner talents as well as by extending the helping hands with each other. Thus, it paves the way to establish, enrich and enhance the skills of every alumni member throughout their lifetime. Provide a variety of benefits and services that help alumni maintain connections to their educational institution and fellow graduates. The purpose of an association is to foster a spirit of loyalty and to promote the general welfare of our organization.

The Alumni association exists to support the institution by sharing their valuable views and ideas on emerging trends, demands of concerned field and their feedback is invaluable indeed. The alumni's contributes in many ways for the development and improvement of the institution. The institution and the students are benefited in various capacities such as students placement, training, expert lectures, career guidance sessions, Industrial visits and mentors. The institution conducts alumni meets every year for the engagement of alumni. The institution aims to develop perpetual relations with the alumni, which in turn will give growth to mutual benefits.

The alumni meets and the events are published in the website

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.4.2 Alumni contribution during the last five years (INR in lakhs) Response: A. ? 5 Lakhs File Description Document Upload any additional information View Document Link for any additional information 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 and in tune with the vision and mission of the institution

Response:

VISION: -

Engineering the future of the nation by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.

Mission: -

To implement holistic approach in curriculum and pedagogy through Industry Integrated Interactions to meet the needs of Global Engineering Environment.

To develop students with knowledge, attitude and skill of employability, entrepreneurship (Be Job creators than job seekers), research potential and professionally ethical citizens.

Description: -

The institute is committed to impart quality technical education in order to empower the youth and women and aims to be a global Institution through continual improvement. The institute is well reputed with a mix of academic faculty, industry / practitioners faculty and research faculty, consistent up gradation of lab equipment's, a wide range of reference books and online e- journals, special efforts to develop communication skills, technical skills and research ability of students. The multifarious projects are undertaken to address and resolve social problems related to health, education, environmental protection, water conservation etc. Various stakeholders such as parents, students, Alumni, Industries, etc were involved in the process of formulation of vision and mission. The institute aims to deliver engineering education through effective teaching learning process and update their knowledge & skills to match the global industrial and technological development through defined objectives.

ACS COLLEGE OF ENGINEERING IS COMMITTED TO:

- Provide Quality Technical Education in Undergraduate, Post Graduate and Doctoral fields as per the university syllabus and beyond in strict compliance with AICTE requirements and Industrial needs through industry institute interaction.
- The Quality Education encompasses the needs and expectations of all interested stake holders with a strong focus on student centric approach and providing them 360° exposure and making them globally competitive.
- The main focus would be to enrich the students with character, building innovative leadership,

- make them employable and successful in their lives by inculcating life employability, entrepreneurship skills and provide ethical values, ensuring that our institution creates employers not employees
- We will strive consistently to achieve these through building competencies among faculties and students and continual improvement of the QMS

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	<u>View Document</u>

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Response:

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

The institution has induced the practices of decentralization and participatory management in keeping with its belief incollective leadership and democratic traditions. A particular reflection of this practice may be seen in the extensive delegation of authority to the Heads of the various Departments in the institution as deliberated below:

1. Internal Quality Assurance Cell (IQAC)

Internal Quality Assurance Cell (IQAC) is centralized (Institutional level) committee responsible forsupervising, modulating and executing the various academic actions & guidelines. It is purposely form forcontinuous& reliable conduction of academic work all through the institute.

1. Academic functioning:

The institution inculcates the culture of collective responsibility amongst its faculty members and theconstitutive departments. The institution delegates authority and provides operational-autonomy at variouslevels. Under the supervision of Principal, and Heads of the Departments are empowered and thedepartments are provided academic autonomy a concrete step towards effective decentralized governingsystem. During this epidemic situation each department is given freedom to take the necessary decisions inconducting the online class and conducting many webinar activates several prepare pertaining to thedevelopment of the students as well as faculties

1. Administrative functioning:

The Administrative Officer in tandem handles the office administrative responsibility distribution and monitoringwith the institutional authorities. Though budget preparation is an administrative responsibility, individualbudgets are prepared at departmental level and final budget is prepared based on those departmental inputs. Every department has the full authority to use the allotted budget for various activities. Various responsibilities and activities necessary for the smooth functioning of the institution isdecentralized into several different committees which members like faculty members, student coordinators parent representatives and industrial represents and all the committees are monitored by IQAC bothInstitution level and in department level.

The Principal conducts weekly meeting with the Heads, in order to delegate different responsibilities and roles to be implemented by the faculty members in line with the quality policy. All the decisions, policies and planning to improve the quality are reviewed and discussed in these meeting before execution. At the end of every semester, the meetings of prominent bodies like Governing Body are scheduled to attest the success rate of the decisions taken and to review the efficacy of the policy.

The management also ensures that the opinions and suggestions made by faculty members and staff members are included in decisions implemented for institutional development, which is reflection of participative Management in the institution.

The institutionsalutes the innovative ideas, concepts and thoughts from the staffs and involves them in decision-making process. The action plans for processes are prepared under the supervision and guidance of the Principal and Senior faculty members. The institution has various committees. The committees are formulated such that the committee has a coordinator with expertise in the domain along with the members from each department. These committees meet to define, monitor and evaluate the policies for implementation and improvement, if any, from time to time.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.2 Strategy Development and Deployment

${\bf 6.2.1\ The\ institutional\ Strategic\ /\ Perspective\ plan\ is\ effectively\ deployed}$

Response:

6.2.1 The institutional Strategic/ perspective plan is effectively deployed

Institutional Strategic plans

Institutional Strategic Plans are formed in the following categories:

1. Reimaging Campuses

- Physical infrastructure
- Digital Infrastructure (Teaching & Learning)
- Library & information centre
- Quality assurance systems

1. Indigenous Commitment

- Research, Development & Innovation
- Financial Planning & Management

1. Inspiring People

- A high performing institution
- Building leadership and capability
- Health and safe workplace

1. Life Ready Graduates

- Placement, Internships & Career
- Graduate attributes
- Student centred wellbeing

1. Engagement Priorities

- Industry- Institute relationships
- Community Service and Extension
- Alumni engagement and interaction
- Permanent affiliation and accreditation of all programs
- Establishing centre of excellence
- Autonomy of the Institution

Strategy Implementation and Monitoring

Strategic development plan is placed for approval by Governing Body and the next step is its implementation. The Strategy implementation is monitored through the IQAC of being implemented and the progress shall be measured from time to time.

Deployment

The plans articulated by the management and principal are communicated to the faculty, students, staff and other stakeholders through meetings, mails and other forms of communication. IQAC has framed the various coordinators to review from time to time and their implementations as per the plan. The institution would like to highlight that the strategic plans is implemented in establishing centre of excellences.

File Description	Document
strategic Plan and deployment documents on the website	View Document
Paste link for additional information	View Document

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Response:

The Institutional Management envisioned in a systematic way with transparency to get the optimum results out of it. The institution has a well-defined hierarchical set up is established from top management to down the level clearly demarking the Duties, Responsibilities, Accountability and Authorities at every stage.

The Governing body is the uppermost decision making body consisting ofmembers of distinguished members from the field of education and nominated faculty members. The members of the Governing body provide inputs to the Chairman for all-round institutional development. The institution has an effective organizational structure, which monitors and improves the institution development, decision-making and policy frameworks. The Institutional Organogram represents the demonstrating effective and efficient functioning of the institutional bodies. The Governing Body of the institution plays the most vital role in designing, implementing and planning of its policies. The Management and the Principal ensure that the institution moves ahead with all the planning, to achieve the highest benchmark in the profession higher education. The Leadership strives to empower society by providing dynamic education.

Few of the key policy decisions, which reflect the effective and efficient functioning of the institutional bodies, are as follows:

- 1. Permanent affiliation for all branches.
- 2. Accreditation of all branches.
- 3. Establishing centre of excellence.
- 4. Autonomy for the Institute.
- 5. Research centre for all branches.
- 6. Research motivation scheme
- 7. Promotion of testing and consultancy activities
- 8. Rewards for best teaching and non-teaching staff
- 9. Higher education promotion

The Governing Body reviews these decisions, policies and planning. The GB isconstituted in accordance with the Statutory Regulatory Authorities (SRA). The Governing body conduct regular meetings in order to have effective implementation of policies and to monitor the value addition in the Academic processes.

The Action plans for implementation are prepared under the guidance of Principal and the Heads of the Department. These policies result in overall development of students. There are various committees in the institution, the coordinators of these committees plan the development activities and ensure their timely execution. IQAC monitors the functioning of all the committees relevant to Teaching-Learning, student enrichment and overall development of the institution to identify areas of improvement and suggest necessary actions.

Appointment and service rules, procedures also reflect the effective and efficient functioning as stated below:

ACSCE will conform to the norms stipulated in Approval Process Handbook of All India Council for Technical Education as on prevailing date. The institute follows procedure of recruitment mentioned above through a committee constituted by Management and the nominee of the University in appointment of teaching faculty, or to fill up the vacancies created on account of resignations tendered by existing staff, termination, or death of staff.

Service Manual summarizes the human resources policies and practices and all members of the Institution should adhere to the values of the Institution in all dealings at or related to the Institution consistent with and as required, by virtue of their positions in the Institution, and in keeping with the principles of justice, equity, fairness and the pursuit of excellence.

Institution Service rule link is pasted below

File Description	Document
Paste link for additional information	View Document
Link to Organogram of the Institution webpage	<u>View Document</u>

6.2.3 Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	<u>View Document</u>
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	<u>View Document</u>

6.3 Faculty Empowerment Strategies

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

Response:

The Institution gives foremost importance to Staff welfare. In association with this, the welfare measures for teaching and non-teaching staff are itemized below:

- 1. Group insurance.
- 2. Medical Leave & Maternity leave for eligible staff members.
- 3. Gym is also accessible for the staff.
- 4. Medical facilities are provided in our sister concern RajaRajeswari Medical College & Hospital.
- 5. Transport is charged minimal for the employees of the institution.
- 6. The Institution inculcates the habit of saving which helps in social security to the employees as per the PF rules and also benefited with E.S.I for medical benefits of the eligible employees for the scheme.
- 7. An enormous number of faculty members have been sponsored to attend National and International Conferences.

- 8. Internet and free Wi-Fi facilities are also available in campus for staff.
- 9. Faculty members are provided with Individual cabin to facilitate good ambience.
- 10. Faculty development programs (FDP) are conducted for faculty members on regular basis to upgrade their skills.
- 11. Skill development courses are organized for non- teaching staff to enhance their skills in work environment.
- 12. The young faculties are motivated and provided the registration fees to pursue a vibrant research career for their publications.
- 13. Shuttle services are available in the campus helps faster and comfortable commutation.
- 14. Elevator facility is enabled in the institution.
- 15. All the staff members are treated on par with each other in obtaining benefits from the institution.
- 16. Women Empowerment Cell is established for creating venues for women members to flourish and gain momentum.
- 17. In a nutshell, the Institution strives hard to keep our staff happy and healthy.

File Description	Document
Paste 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: 18.61

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

2020-21	2019-20	2018-19	2017-18	2016-17
71	60	3	0	0

File Description	Document
Upload any additional information	<u>View Document</u>
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	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: 15.8

6.3.3.1 Total number of professional development /administrative training Programmes organized

Page 84/113 21-05-2022 06:58:22

by the institution for teaching and non teaching staff year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
21	20	17	12	9

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 16.7

6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
35	56	11	5	7

File Description	Document
Upload any additional information	View Document
IQAC report summary	<u>View Document</u>
Details of teachers attending professional development programmes during the last five years	<u>View Document</u>

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

1. Performance Based Appraisal System for Teaching Staff:

The Institution strictly follows all the requirement of recruitment and promotional policies as stipulated by the University, All India Council for Technical Education (AICTE) and Government of Karnataka. The performance of each faculty member is assessed according to the feedback taken after every Internal

Page 85/113 21-05-2022 06:58:22

Assessments. It is analyzed and given suggestions for their area of improvement.

All the faculty members who upgrade their research work through quality publications during the academic year are honored by management and institute through research incentive scheme every year based on the self-appraisal report and Principal's assessment appraisal is done every year. Their respective HODs communicate the staff members who have low performance and a list of such staff members is sent to the management. The management then interacts one to one with these staff members and tries to figure out their problems, difficulties for improving their performance.

1. Non-Teaching Staff

The performance of each Non-teaching Staff member is assessed according to the feedback taken by faculties and HOD and given suggestions for their further improvement based on the self-appraisal report and HOD's assessment appraisal is done every year. The system is transparent. Based on the reviews, the report is submitted to the management for further necessary action.

File Description	Document
Paste link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The Institution has a well-defined procedure to monitor effective and efficient utilization of available financial resources for infrastructure development and academic processes. The institution budget is prepared every year after compiling requirement regarding recurring and non-recurring expenditures.

The institution has constituted for internal audit as follows:

1. Principal: Dr. M S Murali

2. Office barriers: Mrs. Tanuja D C(Accounts officer)

3. Ms. Anuradha – Accountant

4. Ms. Rashmi B – Accountant

The objectives of the internal audit are:

- 1. To evaluate the adequacy of internal cash flow system and management of funds
- 2. To ensure the compliance of the laid down policies and procedures as documented in the financialmanagement manual

Methodology of audit

Scrutiny of all bank and cash transactions, ledger scrutiny analysis of fixed asset fixed asset, registercashbook advance registers checking of bank reconciliation statement, scrutiny of all document related topurchase

Verification of documents

- Interest on advance settlements
- Fixed assets
- Interest income
- Verification of cash
- Improper receipt vouchers
- Accounting lapse
- Difference in opening balance
- Petty cash book
- Record of scrutiny reports

The Governing body (GB) which comprises of the institution authorities and the Members of the Trust monitors all the major financial transactions. The budget is discussed in the GB of the institution. The resolutions of the GB regarding approval for budget are forwarded to the Managing Committee and Governing Council of the trust for Final Approval of the budget to be spent during the academic year under various heads.

The institutionhas constituted a purchase committee comprising of management members. The purchase procedure such as calling quotations, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources. In addition to this, internal and external auditors audit the account of each financial year of the institution. Thus, the utilization of financial resources is monitored at two-tier level.

The internal and external audits are carried out in each half of the financial year.

The statutory auditors find no major objections in the audit and minor audit suggestions are compiled as per procedure.

The Management, Principal and Accountant review the objection raised in the Internal and External audit reports, and the necessary compliances are carried out toward the fulfilment of the objections raised.

File Description	Document
Paste link for additional information	View Document

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

Response: 17.38

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	10.39	6.99	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document

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

Response:

The institution has a structured procedure for mobilization of funds and its optimal utilization, which ensures effective and optimal utilization of finances for academic, administrative and development purpose. This ultimately helps in realizing the Institute's Vision and Mission. As per the guidelines in the service manual of Chapter 7 which clearly explain how to utilize the funds and various authorities, variance report of sanctioned budget and actual expenditure are regularly maintained The delegation of powers for various functionaries is tabulated in 7.1 sub-heading in the service manual.

The various subcommittees and their financial powers, expenses towards hospitality for meetings and

guests for various cadres, expenses towards industrial visits, honorarium towards guests and invitedlecturers are indicated in 7.2 sub-heading in the service manual. under 7.2 the following committees are framed to ensure smooth flow of the process

- 7.2.1 Department Purchase committee
- 7.2.2 Institutional Purchase committee from Rs. 10,000 up to Rs. 1.00 Lakh
- 7.2.3 Institutional Purchase committee more than Rs. 1.00 Lakh
- 7.2.4 Imprest amount towards hospitality for meetings & guests
- 7.2.5. Expenses towards industrial visit
- 7.2.6. Honorarium towards guest & invited lecturers

Every year, the budget is prepared well in advance after taking into consideration the requirement of every Department. Each Department prepares the budget based on the requirement such as equipment, computer and consumables required for next academic session. Principal put up the budget to the management for consideration and approval and Governing Body (GB) meeting and after discussion and necessary corrections/modifications; Governing Body recommends the budget for approval.

The budget is reviewed by the management and approved after necessary changes. As and when required, the institution makes a provision for advance additional fund. The Principal and the Head of Departments discuss the requirement and decide the priorities while allotting financial resources for various purposes; and also ensure optimum use of available financial resources. The Governing body studies the annual expenditure, scrutinizes the budget and provides feedback for efficient use of financial resources. The institution has standardized procedure for sanctioning of funds for various activities and also for settlement of advance and passing of bills for payment.

The Management has given complete support to Principal for organization of various co-curricular and extra-curricular activities like technical events, sponsoring of faculty and staff for various FDPs, skill development programs, providing financial support for attending conferences, workshops, pursuance of higher education etc. Financial support is also provided for participation of students at various nationallevel events.

The management monitors all the major financial transactions. The budget is discussed in the meetings of GB of the institution.

The resolutions of the GB regarding approval for budget are forwarded to the trust for final approval of the budget.

The purchase procedure such as calling quotation, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources. The committee ensures that suitable equipment with right specification is procured at competitive and optimal prices.

File Description	Document
Paste 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) of the institute has committees under its ambit to mainly focus on

- Teaching Learning process (T-L)
- Research and Development
- Industry interaction
- Placement and Training

Teaching-Learning

IQAC takes measures to guide the faculty to focus on outcome based education (OBE) by conducting session on

Course Outcome (CO) formation, assessment and CO, PO attainment

Quality of internal semester question papers, assignments and evaluation

Examination reform

Product development

Introduction and hands on training of LMS

The faculty discuss COs with students at the commencement of the course. The faculty identifies the gaps between CO and PO to plan the activities to bridge them. IQAC has prepared and circulated standard formats for maintaining the relevant documentation.

Academic monitoring committee looks after the attendance and conducts regular review meetings of guardian faculty members. Students with poor attendance are counseled to improve the attendance.

The faculty of the institution upgrades their knowledge through NPTEL course certifications. The management encourages the faculty by reimbursing the registration fee paid after getting the certification from NPTEL or any other.

R&D committee encourages the faculty and students to participate in conferences, seminars, and technical competitions etc.

Industry interaction

IQAC has initiated and the institution has signed a MoU with Center for Test an Data Sciences (CTDS). CTDS is for real time industry projects, internships, sponsored research from companies and government agencies and technology training. CTDS is composed of industry professionals playing the role of mentors and serves as a bridge between industry and institutions, Thecenter focuses on building talent and technology solutions for industries through early collaboration and mutual engagements. Currently the center is working on projects related to Data Analytics, Software Quality Management, Mechanical testing and Characterization.

ACS College of Engineering has established Institution's Innovation Council (IIC) under the guidelines by Ministry of Human Resource Development (MHRD), Govt. of India and 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs).

IQAC has initiated to organize programs to strengthen interaction between institution and industry which involves contribution to every individual faculty.

Placement and Training

The Placement and Training cell will organize on a regular basis various value addition programs according to the need of the industry. During the commencement of the semester IQAC plans for the programs for the employability skill development to the students for enhancing the placement ratio.

Internal Academic Audit

IQAC conducts internal academic audit at the end of each semester in accordance with the VTU to ensure all the academic processes are carried out regularly and documentation is maintained accordingly.

Induction program for newly appointed faculty

IQAC request the Head of the Departments to make aware about the roles, responsibilities and rules / regulations of the University for newly appointed faculty. Familiarize them with the infrastructure, resources/common facilities. The newly faculty are made awareness about concept of OBE. The HoD's explains and make them able to define course objectives, COs and calculate CO attainment.

File Description	Document
Paste 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 and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Response:

IQAC continuously reviews the quality of the teaching learning process at the end of each semester in accordance with the academic calendar to ensure all the academic processes are carried out regularly. All the faculties calculate the CO & PO attainment of their respective subject(s) and it is submitted to the departmental coordinator. The HoD's take necessary actions if anyone who have less than the set target of the attainment values of CO and PO.

The assessment questions are set based on the learning levels of Bloom's Taxonomy. Bloom's Taxonomy facilitates the faculty to define measurable course outcomes and students to better identify the questions and hence write the suitable answers. Different weightages are assigned to learning levels from first year to final year subjects. More weightage is given to the lower learning levels for first year subjects, while weightages for higher levels go on increasing from second year onwards. These aid students to develop critical thinking which orbits make them able to design solutions for complex engineering problems.

The institution has initiated active innovation cell (Pongu Ventures) a Business incubator to promote entrepreneurship skills. Center for Test and Data Sciences (CTDS), an interdisciplinary center to establish better collaboration between academia and industries. Also the institution has established UC Berkeley and Intel intelligent System laboratory to bridge the gap between industry and academic. The institution is constantly reviewed to reflect a realistic view in the emerging context by the collaboration with the industries.

Students are asked to watch video lectures available on open course ware modules to improve the knowledge and aware the emerging trends in their specialized course. This also improves learning skills of the students as well as inculcates habit of self-study which further increases their confidence and also helps in their career progression in near future.

The major initiatives taken over the last five years include the following:

- Introduction of Home Assignments
- Automation of Admission Processes Provision for online fee payment
- Curriculum Development Workshops in many subjects
- Green initiatives in Campus tree plantation
- MoUs with prestigious Institutes, Universities, Govt. agencies

Outcomes:

Please add the workshop conducted in the awareness of the curriculum development, tree plantation and MoU details from NAAC cycle 1 to now (for example 35 in NAAC Cycle 1 now present 50 functional MoUs)

File Description	Document
Paste link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality intitiatives with other institution(s)
- 3. Participation in NIRF
- 4.any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

Response: A. All of the above	
File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

ACS College of Engineering empowers the students to believe in their potential to achieve their dreams regardless of their gender identity. The Women Welfare and Sexual Harassment and Empowerment Committee Cell (SHE) at ACS College formulate the annual plan to implement gender-equity in principle and practice. Internal complaints are sorted in this committee. They organize women specific programs and motivate them in administration and leadership roles.

International Women's day is celebrated every year which is a special event for women which creates a platform for girl students and staffs in the institute to participate in various activities and exhibit their talents. Girls students are equally encouraged to participate in cultural activities, annual sports etc.

The institution tries to implement and maintain gender equality throughout its working operations. This can be seen in the fact that, the institution provides equal opportunities irrespective of gender when employment is considered as well as maintain an equal pay grade for all its employees irrespective of genders. Apart from International Women's day, the institution organize women empowerment program likes International women's day every year, women's nutritional program, Yoga to stay Health for promoting the gender equity in the institution.

The following measures initiated by the intuition for the promotion of gender equity during the last five years are:

- International Women's day
- Leadership Talk on Women Entrepreneurship and Empowerment
- Gender Sensitization Program
- Gender Equality

For the promotion of gender equity and sensitization, the institution have Annual gender sensitization action plan. The following facilities are provided for women's in the campus are listed below:

1. Safety and security

- i. CCTV Camera
- ii. Visitor register
- iii. Female Warden Staff in Hostel
- iv. Hostel Leave form facility
- v. Mess facility for Girls

- vi. Medical facility in campus
- vii. Discipline in campus
- viii. Parent teacher meeting

2. Counseling

- i. Faculty Advisor
- ii. Anti Sexual Harassment Committee
- 3. Common Rooms
- 4. Day care center for young children
- 5. Any other relevant information:
 - i. Open and transparent system
 - ii. Awareness program
 - iii. ACSCE rules and regulations
 - iv. Active participation by female staff and student
 - v. Health facilities in hostel
 - vi. Internet Facilities in Ladies Hostel
 - vii. Common reading room facilities in Ladies Hostel

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Link for annual gender sensitization action plan	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant

- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	<u>View Document</u>
Any other relevant information	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

The Institution has taken up various initiatives to maintain an environment friendly campus. The campus is full of greenery and is kept clean and tidy. The gardens, lawns and plantations inside the campus is maintained by a dedicated group of caretakers, sweepers and housekeeping staff. The Institution implements effective waste management through waste segregation and recycling of the waste. The Students and faculties were also actively involved by knowing their perspective about the waste management techniques in the campus. The institution has the following types of facilities for the management of degradable and non degradable wastes, they are:

1. Solid waste management:

The Institution implements solid waste management by enforcing the waste segregation rules. Dustbins are placed near to every classroom, laboratory, rest room, and mess at different locations in the campus. Sweepers are allotted to each floor who manages all the waste generated in the campus. The institution has successfully completed and recently commissioned a Biogas plant to handle 80 kg/day of solid waste. The Institution has organized Swachh Bharat Mission. Unnatha Bharath Abhiyana Activities were conducted on solid waste management in Ramanagara District

2. Liquid waste management:

The Institution follows the systematic procedure for proper management and disposal of liquid waste. The wet waste from the college, hostels and canteen is given away to bio fertilizer plants for making eco-friendly fertilizers. A sewage treatment plant for the college is being conceived. This treated water is then used for the gardening and other purpose. Institution also conducts discussions with students to make them

aware about the liquid waste management techniques.

3. Bio Medical Waste:

The minimum biomedical waste generated from the institution is disposing to the Bruhath Bengaluru Mahanagara Palike (BBMP) through Rajarajeswari Medical College and Hospital (Institution under Moogambigai Charitable and Educational Trust). The disposing of biomedical waste is doing as per the MoU signed between BBMP and Rajarajeswari Medical College and Hospital.

4. E-waste management:

The Institution as undertaken a number of E-waste Management initiatives with the objective of creating an eco-friendly environment in the campus. E-waste such as computers and its peripherals are upgraded regularly to continue usage and to avoid its wastage.

5. Hazardous and Radioactive waste:

Live (Hazardous) waste discarded in to the environment after water treating from the treatment plant and from the institution no radioactive waste is not generated.

File Description	Document
Link for Geotagged photographs of the facilities	<u>View Document</u>

7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Link for any other relevant information	View Document

7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4.Ban on use of Plastic

5.landscaping with trees and plants

Response: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	<u>View Document</u>
Geotagged photos / videos of the facilities	View Document
Link for any other relevant information	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	<u>View Document</u>
Certification by the auditing agency	<u>View Document</u>
Link for any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Divyangjan friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Link for any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

To build a nation of youth who are noble in their attitude and morally responsible, the college organizes and conducted several activities to build and promote an environment for ethical, cultural, and spiritual values among the students and staff. To develop the emotional and religious feelings among the students and the faculty, commemorative days are celebrated on the campus with the initiative and support of the management for not only recreation and amusement but also to generate the feeling of oneness and social harmony.

The institution believes in equality of all cultures and traditions as is evident from the fact that the Students belonging to different caste, religion, regions are studying without any discrimination. Though the institution has diverse socio-cultural background and different linguistic, we do not have any intolerance towards cultural, regional, linguistic, communal socio economic and other diversities.

The institution takes an initiative for celebrating commemorative days like Teachers Day, Women's day, Yoga day, Kannada Rajyothsava, Kannada Aksharaabhyasa, and also celebrates the cultural and regional festivals like Ayudh Pooja celebration, Ganesha Festival. The institution takes and imitative in organizing Induction Program, Farewell Program, Orientation program for the students to inculcate in them the ethos and culture of the institution.

The institution takes an imitative to inculcate the values among the students through the events which revolve around culture. They are the most effective way of bringing the youth together on the same platform, boosting social interaction and exchanging many ideas and concepts. The root of India lies in its culture. The institution, takes an responsibility to water those roots to see them prospering. It organizes annual cultural event Arohana for students which includes, literary events, gaming events, professional events, cultural events and so on.

Motivational lectures of eminent persons of the field are arranged for all-round development of the students for their personality development and to make them responsible citizens following the national values of social and communal harmony and national integration. Besides academic and cultural activities, we have built up many strong infrastructures for a variety of sports activities for the physical development of the students.

In this way the institute's efforts/initiatives in providing an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic, and other diversities.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Link for any other relevant information	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

At ACSCE, we believe in giving holistic all round education to the students. And sensitizing students on our constitutional rights, values, duties and responsibilities is one of the primary educations given at the institute through various means.

Sensitization of students and employees of the Institution to the constitutional obligations is done through curriculum as well as through extra-curricular activities. Many of the subjects offered have topics which sensitize the students about the constitutional obligations. The University has introduced a compulsory paper on the Constitution of India at Degree level across all engineering disciplines to create awareness and sensitizing the students and employees to constitution obligation. As a part of strengthening the democratic values. Also, all students take a course on Environment studies in their first year which gives them insight into environment acts, wildlife protection act, forest act, global environmental concerns etc.

In addition to this many regular programs are conducted by Institute Innovation Council (IIC) cell of the institute to educate women about their rights. Also seminars and workshops are conducted on days of national importance, on various rights, duties and responsibilities of citizen. Seminars on topics like Right to Information, Sexual Harassment, and Gender Equity are conducted periodically.

The students of ACSCE of all branches study constitution of India as a compulsory paper which sensitizes the students about constitutional obligations. Every year Republic Day is celebrated on 26th Jan by organizing activities highlighting the importance of Indian Constitution. Independence Day is also celebrated every year to highlight struggle of freedom and importance of Indian constitution. The initiative taken by the institution for sensitization of students and employees to constitution obligations are:

- 1. Syllabus is framed on Constitution of India by the University
- 2. Republic Day Celebration
- 3. Independence Day Celebrations

4. National Voters Day Celebration

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for any other relevant information	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document
Code of ethics policy document	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

ACS College of Engineering is committed to promote ethics and values amongst students and faculty to encourage the same, the college organizes National festivals as well as Anniversaries for the great Indian Personalities. The institution takes a responsibility for the celebration of commemorative days, which is an integral part of learning and building a strong cultural belief among the student. The College makes tremendous efforts in celebrating the national and international days, events and festivals throughout the year.

The institution believes in celebrating the glorious festivals and activities of both National as well as International levels such as:

1. Republic day (26th January)

- 2. Independence day (15th August)
- 3. International Yoga day (21st June)
- 4. World Environmental day celebration (12th June)
- 5. National Voters Day Celebration (25th January)
- 6. Kargil Vijay Diwas (26th July)
- 7. Teachers day (5th September)
- 8. National Education Policy (2020) Program
- 9. Kalam's Day

The various activities during these functions is maintained with a view of improving our knowledge and understanding of the various aspects related to each of these commemorative days. It has become instrumental and helps building today's youth. Importance of national festivals and events preach them and remind them about our country's cultural heritage and history. Our students are on a mission towards better India by breaking the boundaries of religion and caste. Thoughts of great Indian personalities showed into the young minds through the exhibitions and programs conducted on these days. The institution practices pluralist approach towards all religion functions and encourages the students and faculty to showcase the same. Every year our institute organizes the national festivals and birth / death anniversaries of the great Indian personalities. Staff and students get to know the importance of national integrity in the country in general and their roles in it.

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

Best Practice – 1

1. Title of the Practice:- Transform students project into paper publication.

2. Objective;-

- To encourage students to opt Research and Development as career.
- To conduct useful courses and technical seminars, workshops & conferences as per the current industry need.
- To participate various events like project competition, paper presentations etc.
- To develop awareness about participation in different events held at state, national and international level.
- To encourage students to the area of Intellectual Property Rights.
- To provide mentoring to engineering students from professionals.
- To enhance teaching learning process in Engineering Education.

3. The Context:-

Innovation and creativity are the vital parameters for development of state-of-art technologies to meet challenges of globalization. In today's Knowledge Based Economy, role of upcoming Engineering Graduates will be of upmost importance. There is urgent need to motivate Engineering Graduates to opt their career in Research and Development to accelerate the economic development of the country. Right from first year of engineering, students need to be exposed to recent technological developments and to be encouraged to solve day to day problems of industry and society. There is a need to provide more emphasis on project based learning and situation based learning. An International level TECH FEST like "MARS SUMMIT" and Project Exhibition, organized by the institute is intended to give students a stepping-stone for entering into the Engineering industry.

4. The Practice:

- It is an opportunity for showcasing the efforts and expertise in creating innovative solutions to real-world problems by engineering students.
- The students exhibit their project work along with papers, presentations and publications.
- Classes that incorporate real-world, experiential projects not only foster lifelong learning, but also appeal to students and help them identify interesting career paths.
- Students also get to practice soft skills such as networking and teamwork along with technical skills such as analytical thinking and budgeting.
- Students can increase learning outcomes by transferring knowledge such as industry-specific terminology and experience such as insight into analyzing a problem.
- Providing detailed briefs about all tasks and ensuring that students are carried out projects efficiently and estimated time of completion.

5. Evidence of success:

- Over the period of time there is a significant improvement in the quality of projects exhibited by the students
- Due to interaction of industry professionals, small and medium scale entrepreneurs with students involved in conferences, seminars etc. resulted in the improved quality of projects.
- Some participants have gone for the IPR with their projects and are in the process of getting patents for the innovative project ideas.
- o Some students have developed their own ideas and started converting those ideas to become an

entrepreneur.

- Enhancement in the application knowledge of students.
- Students are actively participating in different activities, it makes a positive improvement in students like personality development, communication skills, management skills, programming skills etc.
- Project management resources should provide students with sufficient information on how to develop a project work stream and sources may include educational publications, such as case studies on project management.
- As students and faculty work together, it builds team spirit among students. It also helps for faculty since students are having innovative ideas. Bonding is formed among students and faculty. It helps in many perspectives for students.

6. Problems Encountered and Resources required:

- For faculty members, however, implementing project-based learning can be challenging it often requires instructors to reformat their courses and play a large, hands-on role in overseeing student projects.
- Research confirms that under the right conditions project-based learning, although sometimes difficult to implement, can improve student learning.
- Small issues can get out of control if they are not addressed immediately. Attend to all issues at the onset to ensure that the project publications proceed smoothly.
- Students are hesitating to take part in paper presentation because of lack of confidence and daring.
- Feeling burden of academics to participate in activities and to motivate students for participation is challenge.

Weblink: http://www.acsjse.in/index.php/acsjse

Best Practice-2

1. Title of the Practice: "Training students in cutting edge Open Source Software"

2. Objectives of the practice

- To offer value added courses to students across disciplines in the niche areas in the IIT Bombay (Spoken Tutorials) mode
- To promote mass usage of Open Source Software among students and teaching faculty.
- To reach out software learning to students of all the disciplines to excel in their domain.

3. The Context

India is a front runner in the computer software area and to maintain sustainability there is a need for updated domain knowledge. There is a need to facilitate students with different background / economic status / linguistic nature to software education in a student-friendly way in an affordable way. There is a need to generate discipline specific graduates with knowledge on skill base software to handle the domain specific Artificial Intelligence needs.

4. Evidence of Success

Total 15 value added software courses were offered and 543 students enrolled in these courses across departments. The employ-ability skills of the students has enhanced since many employers opting to select students with updated software training in emerging areas.

5. Problems Encountered and Resources Required

Problems Encountered

Difficulty in creating awareness among non circuit branch students to pursue open source software courses. Problems in breaking the mental barrier of academically weak students to pursue these courses due to misunderstanding of complexity level.

Resources Required

There is a need to create more awareness on students belonging to non engineering category about the benefits of pursuing online based, discipline specific, soft ware courses. Faculty members shall be motivated to pursue the open source software courses to understand better the learning tools and disseminate the information to students.

https://spoken-tutorial.org/statistics/training/?training_planner__academic__state=&training_planner__academic__city=&training_planner__academic__institution_type=&training_planner__academic__institution_name=ACS+College+of+Engineering&department=&course_type=&course__foss=&sem_start_date_aft er=&sem_start_date_before=&lang=------&status=1

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

The Institution Distinctives of the Institution is

"Institution's Innovation Council (IIC)"

1. About IIC

ACS College of Engineering was established Institution's Innovation Council (IIC) under the guidelines by Ministry of Human Resource Development (MHRD), Govt. of India and 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs).MIC has envisioned encouraging creation of 'Institution's Innovation Council (IICs)' across selected HEIs. The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are in formative years. A network of these IICs will be established to promote innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in the campuses. It's our proud privilege to announce that ACS College of Engineering, Bangalore is selected as a member of MHRD's Innovation Cell in SWRO Zone

2. Major Focus of IIC

- To Start-up supporting Mechanism in HEIs.
- To create a vibrant local innovation ecosystem
- To prepare institute for Atal Ranking of Institutions on Innovation Achievements (ARIIA) Framework.
- To establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas.
- To develop better Cognitive Ability for Technology Students.

3. Function of Institutions Innovation Council

- Promote innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in the campus.
- To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bounded fashion.
- Identify and reward innovations and share success stories.
- Organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators.
- Network with peers and national entrepreneurship development organizations.
- Create an Institution's Innovation portal to highlight innovative projects carried out by institution's faculty and students.
- o Organize Hackathons, idea competition, mini-challenges etc., with the involvement of industry.

4. Benefits to Institute, Faculty and Students

- No major capital investment required for establishing IIC as it will make use of existing local ecosystem.
- Students/Faculty associated with IIC will get exclusive opportunity to participate in various Innovation related initiatives and competitions organized by MHRD.
- Win exciting Prizes/Certificates every month.
- Meet/Interact with renowned Business Leaders and top-notch academicians.
- Opportunity to nurture and prototype new ideas.
- Mentoring by Industry Professionals.
- Experimentation with new/latest technologies

• Visit new places and learn a new culture.

Weblink: https://www.acsce.edu.in/institutions-innovation-council-iic/

File Description	Document	
Link for appropriate web in the Institutional website	View Document	
Link for any other relevant information	View Document	

5. CONCLUSION

Additional Information:

ACS College of Engineering (ACSCE) has active innovation cell (Pongu Ventures) a Business incubator to promote entrepreneurship skills. Center for Test and Data Sciences (CTDS), an interdisciplinarycenter to establish better collaboration between academia industries. Also the institution has established UC Berkeley and Intel intelligent System laboratory to bridgethe gap between industry and academic. The institution is constantly reviewed to reflect a realistic view in the emerging context by the collaboration with the industries.

ACS College of Engineering has established Institution's Innovation Council (IIC) under the guidelinesby Ministry of Human Resource Development (MHRD), Govt. of India and 'MHRD's Innovation Cell(MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions(HEIs). ACSCE is selected as a member of MoE (Ministry of Education) Innovation cell in SWRO Zone.

The webinars and associated courses offered by different platforms such as NPTEL and SWAYAMhave ensured a structured implementation of OBE among faculty and students.

The Institutional performance excellence aims to achieve with strategic insights and diagnose and understanding of thestrength, weakness and potential areas of improvement.

Concluding Remarks:

ACS College of Engineering (ACSCE) with the existence of 12 years has carried imparting excellence technical education on the perception of student experience and the mission of institution. The institution analyzes excellence through the lens of different key stakeholders, including students and families, society and employers.

The Institution adopt the policy guidelines as envisaged in AICTE, VTU, Government of Karnataka, NAAC, NBA, NIRF as applicable from time to time.

The NAAC & NBA accreditation of the institution has focused in the practice of excellence. This is the visible improvement in the process and system and creation of higher benchmarks of the institution to participate for the NIRF ranking, ATRIA etc.

The Governance and Management of the institution embrace transformation as a continuous wayof teaching learning and hence adopt the transformation to respond to new challenges to ensure better learning outcomes.

ACS College of Engineering accredited by NBA for the departments of AE, BM, CSE, ECE & ME. ACS College of Engineering, Bengaluru is accredited by NACC with 'A' Accredited, & International Accreditation

from HLACT was also secured. Throughout the period, ACSCE has set down significant progress and considered as one of the rapid-developing Engineering Colleges in Karnataka State.

ACSCE emphasis in industry and Society Oriented Research culture, Innovation culture, Interdisciplinary culture, Industry partnership culture by establishing "Joint R&D Centres of Excellence", entrepreneurship development culture, culture for attracting talent & faculty retention culture, culture of Networking (Student, faculty & other specialist staff), Patents & IPR culture, student Centric culture, where teacher will play role of facilitator and Feedback cum corrective measures based culture.

The Institution seeks the NAAC certification will be a measure to evaluate and assurance the standard of education delivered at ACSCE. It is anticipated that the NAAC accreditation further promotes the institutional benchmarks.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID | Sub Questions and Answers before and after DVV Verification

2.1.1 Average Enrolment percentage (Average of last five years)

2.1.1.1. Number of students admitted year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
295	321	347	354	338

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
294	319	347	354	338

2.1.1.2. Number of sanctioned seats year wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
618	678	726	684	492

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
618	678	726	684	492

Remark: As per HEI response

Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

3.2.2.1. Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
92	72	41	36	38

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
6	5	2	1	4

Remark: Only activities related to Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship are to be considered. The values are updated accordingly.

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

4.2.4.1. Number of teachers and students using library per day over last one year

Answer before DVV Verification: 432 Answer after DVV Verification: 87

Remark: As per HEI response

- Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)
 - 5.2.3.1. Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
14	19	8	10	12

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
13	17	6	10	12

5.2.3.2. Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
15	20	9	11	12

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
15	20	9	11	12

Remark: As per HEI response

2.Extended Profile Deviations

ID	Extended Questions
1.1	Number of courses offered by the Institution across all programs during the last five years
	Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
416	432	404	453	445

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
416	436	408	453	445

2.1 Number of students year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1309	1191	1160	1116	1178

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1309	1198	1160	1117	1178