YEARLY STATUS REPORT - 2020-2021

Part A

Data of the Institution

1.Name of the Institution   Velammal Engineering College

- Name of the Head of the institution   Dr.N.Duraipandian

- Designation   Principal

- Does the institution function from its own campus?   Yes

- Phone No. of the Principal   04426591842

- Alternate phone No.   04426590758

- Mobile No. (Principal)   9123547591

- Registered e-mail ID (Principal)   principal@velammal.edu.in

- Address   Velammal New-Gen park,Ambattur -Redhills Road

- City/Town   Chennai

- State/UT   Tamil Nadu

- Pin Code   600066

2.Institutional status

- Autonomous Status (Provide the date of conferment of Autonomy)   29/04/2019

- Type of Institution   Co-education

- Location   Urban

- Financial Status **Self-financing**

- Name of the IQAC Co-ordinator/Director **Dr.P.Visu**

- Phone No. **04426590758**

- Mobile No: **9884002675**

- IQAC e-mail ID **iqac@velammal.edu.in**

3.Website address (Web link of the AQAR (Previous Academic Year) http://velammal.edu.in/

4.Was the Academic Calendar prepared for that year? **Yes**

- if yes, whether it is uploaded in the Institutional website Web link: https://velammal.edu.in/wp-content/uploads/2022/06/Handbook-20-21.pdf

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	**A**	**3.27**	**2009**	**30/09/2009**	**30/09/2014**
Cycle 2	**A**	**3.07**	**2016**	**17/03/2016**	**17/03/2021**
Cycle 3	**A**	**3.07**	**2020**	**18/03/2021**	**31/12/2024**

6.Date of Establishment of IQAC **07/08/2010**

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount
Dr.A.Balaji Ganesh	DST-SATYAM	DST	12/03/2020	3172000
Velammal Engineering College	Newgen - IEDC	DST	01/11/2017	28700000
Velammal Engineering College	Higher Education cell for SC/ST	AICTE	14/03/2019	820000
Velammal Engineering College	Skill and Personality Development Program Centre for SC/ST students	AICTE	03/03/2020	1129185

8.Provide details regarding the composition of the IQAC:

- Upload the latest notification regarding the composition of the IQAC by the HEI [View File]

9.No. of IQAC meetings held during the year **2**

- Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website? **Yes**

- If No, please upload the minutes of the meeting(s) and Action Taken Report No File Uploaded

10.Did IQAC receive funding from any funding agency to support its activities during the year? **No**

- If yes, mention the amount

11.Significant contributions made by IQAC during the current year (maximum five bullets)

- Created E-Contents for many theory and laboratory courses to support student's online learning. • Faculty members and students have effectively utilized the google class room for sharing teaching and learning materials. • Established Institution Innovation Council in the college.

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
Compliance visit report to be submitted for extension of NBA accreditation	BE Civil engineering and BE Electronics and communication Engineering programs got an extension of one more year accreditation from NBA.
Effectively utilize the online platforms for teaching and learning process	Faculty members and students effectively utilized various online platforms for teaching and learning, and examinations to overcome the difficulty in offline classes due to covid-19

13.Was the AQAR placed before the statutory body?   **Yes**

- Name of the statutory body

Name of the statutory body	Date of meeting(s)
IQAC meeting	17/09/2022

14.Was the institutional data submitted to AISHE ?   **Yes**

- Year

Part A
Data of the Institution

1.Name of the Institution	Velammal Engineering College
• Name of the Head of the institution	Dr.N.Duraipandian
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone No. of the Principal	04426591842
• Alternate phone No.	04426590758
• Mobile No. (Principal)	9123547591
• Registered e-mail ID (Principal)	principal@velammal.edu.in
• Address	Velammal New-Gen park,Ambattur -Redhills Road
• City/Town	Chennai
• State/UT	Tamil Nadu
• Pin Code	600066
2.Institutional status	
• Autonomous Status (Provide the date of conferment of Autonomy)	29/04/2019
• Type of Institution	Co-education
• Location	Urban
• Financial Status	Self-financing
• Name of the IQAC Co-ordinator/Director	Dr.P.Visu

• Phone No.	**04426590758**
• Mobile No:	**9884002675**
• IQAC e-mail ID	**iqac@velammal.edu.in**
3.Website address (Web link of the AQAR (Previous Academic Year)	http://velammal.edu.in/
4.Was the Academic Calendar prepared for that year?	**Yes**
• if yes, whether it is uploaded in the Institutional website Web link:	https://velammal.edu.in/wp-content/uploads/2022/06/Handbook-20-21.pdf

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	**A**	**3.27**	**2009**	**30/09/2009**	**30/09/2014**
Cycle 2	**A**	**3.07**	**2016**	**17/03/2016**	**17/03/2021**
Cycle 3	**A**	**3.07**	**2020**	**18/03/2021**	**31/12/2024**

6.Date of Establishment of IQAC	**07/08/2010**

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount
Dr.A.Balaji Ganesh	DST-SATYAM	DST	12/03/2020	3172000
Velammal Engineering College	Newgen - IEDC	DST	01/11/2017	28700000
Velammal Engineering College	Higher Education cell for SC/ST	AICTE	14/03/2019	820000
Velammal Engineering College	Skill and Personality Development Program Centre for SC/ST students	AICTE	03/03/2020	1129185

8.Provide details regarding the composition of the IQAC:

• Upload the latest notification regarding the composition of the IQAC by the HEI	View File	

9.No. of IQAC meetings held during the year	**2**
• Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes
• If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded

10.Did IQAC receive funding from any funding agency to support its activities during the year?	**No**
• If yes, mention the amount	

11.Significant contributions made by IQAC during the current year (maximum five bullets)

• Created E-Contents for many theory and laboratory courses to support student's online learning. • Faculty members and students have effectively utilized the google class room for sharing teaching and learning materials. • Established Institution Innovation Council in the college.

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
Compliance visit report to be submitted for extension of NBA accreditation	BE Civil engineering and BE Electronics and communication Engineering programs got an extension of one more year accreditation from NBA.
Effectively utilize the online platforms for teaching and learning process	Faculty members and students effectively utilized various online platforms for teaching and learning, and examinations to overcome the difficulty in offline classes due to covid-19

13.Was the AQAR placed before the statutory body?	Yes

- Name of the statutory body

Name of the statutory body	Date of meeting(s)
IQAC meeting	17/09/2022

14.Was the institutional data submitted to AISHE ?	Yes

- Year

Year	Date of Submission
2021-22	21/04/2022

15.Multidisciplinary / interdisciplinary

UG Programme Artificial Intelligence and Data Science are introduced in both multidisciplinary and interdisciplinary fields. Many open elective courses are offered to students of all the programs with 3 credits each to encourage students to undergo courses with interdisciplinary nature. Students from different programs joining together and doing projects and participating various national level design competitions/ challenges organized by reputed institutions and Government agencies

16.Academic bank of credits (ABC):

NA

17.Skill development:

Soft Skills and hard skills are enhanced with a greater number of courses such as Quantitative Aptitude and Verbal Reasoning, Quantitative Aptitude & Behavioral Skills, Quantitative Aptitude & Communication skills, value added courses, and internships. Activities are conducted through various professional societies and clubs for improving skills.

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

The course constitution of India is a mandatory course for all the programs and is offered in the second semester. Other than this, Value based courses are offered such as Personality & Character Development, Professional Ethics in Engineering courses etc in the higher semesters.

19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

In Velammal Engineering College, OBE has been implemented since 2014. Course Outcomes are well defined for every course. Course outcomes are mapped with Program Outcome and Program Specific Outcomes. At the end of course, Course attainment is computed based on target and threshold. At the end of program, Program attainment is calculated for the particular batch. Based on the attainment level of each POs, the actions are planned and implemented in the next year. Eight UG programs are accredited by NBA. Various committees such as Department Academic Committee (DAC), Internal Quality Assurance Cell (IQAC) and Program Assessment Committee (PAC) are framed to assess OBE every year. Committees monitor the implementation of OBE.

20.Distance education/online education:

Velammal Engineering college encourages students and faculty members to undergo online courses offered by reputed organizations like NPTEL and SWAYAM platform to enhance/ upgrade their knowledge in the emerging areas.

Extended Profile

1.Programme

1.1	**12**
Number of programmes offered during the year:	

File Description	Documents
Institutional Data in Prescribed Format	[View File](#)

2.Student

2.1	**2716**
Total number of students during the year:	

File Description	Documents
Institutional data in Prescribed format	[View File](#)

2.2	**814**
Number of outgoing / final year students during the year:	

File Description	Documents
Institutional Data in Prescribed Format	[View File](#)

2.3	**2715**
Number of students who appeared for the examinations conducted by the institution during the year:	

File Description	Documents
Institutional Data in Prescribed Format	[View File](#)

3.Academic

3.1	**415**
Number of courses in all programmes during the year:	

File Description	Documents
Institutional Data in Prescribed Format	[View File](#)

3.2

Number of full-time teachers during the year:

204

File Description	Documents
Institutional Data in Prescribed Format	[View File](#)

3.3

Number of sanctioned posts for the year:

184

4.Institution

4.1

Number of seats earmarked for reserved categories as per GOI/State Government during the year:

507

4.2

Total number of Classrooms and Seminar halls

72

4.3

Total number of computers on campus for academic purposes

850

4.4

Total expenditure, excluding salary, during the year (INR in Lakhs):

1136.82

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

The curricula have been formulated in accordance with the guidelines of AICTE, affiliating university and, in alignment with the vision and mission of the Institution. The institution has

strategized various ways with the input of industry and academic experts to strengthen the curriculum and syllabi on par with the industry requirements for betterment of the student community. The curriculum is designed in the form of Humanities and social science, Basic and Engineering Sciences, Professional Core, Professional and Open electives and Employability Enhancement courses with the importance on overall development and knowledge acquisition of students by considering the technological advancements in the industry and society.

The curricula and syllabus are updated through the Programme Advisory Committee, Boards of Studies in the department level, Academic Council in the institution level and by faculty members of the institution.Institution regularly invites industry experts in specialized streams to share their views, experience and current trends with students and faculty to update and upgrade their knowledge. POs and PSOs are formulated for every programme based on the 'OBE' approach. Course objectives and outcomes are prepared for each course following the appropriate levels of Blooms taxonomy.

File Description	Documents
Upload additional information, if any	[View File]()
Link for additional information	[https://velammal.edu.in/NAAC-assets//files/NAAC/2020-21/Criteria1/1.1.1-Additional-Information.pdf]()

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

12

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	[View File]()
Details of syllabus revision during the year	[View File]()
Any additional information	No File Uploaded

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

402

File Description	Documents
Curriculum / Syllabus of such courses	[View File](#)
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	[View File](#)
MoUs with relevant organizations for these courses, if any	**No File Uploaded**
Any additional information	**No File Uploaded**

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced across all programmes offered during the year

84

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	[View File](#)
Any additional information	[View File](#)
Institutional data in prescribed format (Data Template)	[View File](#)

1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

12

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	[View File](#)
Any additional information	[View File](#)
List of Add on /Certificate programs (Data Template)	[View File](#)

1.3 - Curriculum Enrichment

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

To incorporate and integrate the crosscutting issues relevant to

Gender, Environment and Sustainability, Human Values and Professional Ethics into the curriculum, Institute has introduced courses like Environmental Science and Engineering, Constitution of India. Engineering Ethics etc. in the UG programmes.

The institution has a Women Empowerment Cell to provide counselling to students, promote gender equity among students and also deal with related issues of safety and security of female students, staff, and faculty. Class representatives are equal with both boys and girls. Without gender discrimination female students are represented in NCC, E- Cell etc.

Students are given ample opportunity to learn about the climate change and potential hazards of climate change. Various extension programmes are being organized by the Institute through NSS/YRC unit to create awareness among the rural community with respect to ecological balance and its importance. In order to sensitize students about the environment and sustainability issues, a number of activities such as seminars, workshops, guest lectures, industry visits and field visit are organized for students of all programmes.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	View File
Any additional information	No File Uploaded

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

14

File Description	Documents
List of value-added courses	View File
Brochure or any other document relating to value-added courses	View File
Any additional information	No File Uploaded

1.3.3 - Number of students enrolled in the courses under 1.3.2 above

1601

File Description	Documents
List of students enrolled	View File
Any additional information	View File

1.3.4 - Number of students undertaking field work/projects/ internships / student projects

1664

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	View File

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni	A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://velammal.edu.in/NAAC-assets//files/NAAC/2020-21/Criteria1/1.4-Feedback-System.pdf
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	View File
Any additional information	No File Uploaded

1.4.2 - The feedback system of the Institution comprises the following	A. Feedback collected, analysed and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	https://velammal.edu.in/wp-content/uploads/2022/10/Feedback-analysis-Action-taken-Report-All-dept.pdf
Any additional information	View File

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

2.1.1.1 - Number of students admitted (year-wise) during the year

632

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

2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

365

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

Identifies learners as slow learners and advanced learners based on a wide range of ongoing assessment components, such as Continuous Internal Evaluation tests throughout the semester and Semester End Examination at the end of the semester. Assignment presentations, quizzes, class tests, teacher-student interactions and mentor-mentee meetings are also done for effective evaluation of students learning levels.

Academic coordinators, Faculty class advisors and mentors examine the students' academic progress on a regular basis and direct them in order to enhance their performance which assures their academic progression.

Initiatives for Assisting the Slow Learners:

- Remedial classes and extra classes are offered to help the slow learners, absentees, the students who participate in sports and other activities in order to improve their academic performance.

- Counseling with mentors on regular basis with respect to academics.
- Creating awareness to the parents about the performance of the student periodically, so that the parents too will take the responsibility towards the student for his/her betterment.
- During Project work/in-plant training they are teamed with advance learners for enabling the peer learning.

Initiatives For Motivating Advanced Learners:

- The students are encouraged to do online certification courses like NPTEL SWAYAM, COURSERA, UDEMY, Edx etc.
- Advanced learners are motivated and supported to attend conferences, workshops, project expos, hackathons, competitions and technical events.

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	Nil

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
10/03/2021	2718	204

File Description	Documents
Upload any additional information	[View File]()

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:

The faculty members encourages students to actively participate in the learning process of all the courses offered in the college. The student's centric approaches experimental learning, participatory learning and problem-solving methodologies used are helped students to enhance the learning experiences in the college. The methodology helps to transform students from being passive recipients to active participants.

The student centric methods Project work, role play, Internship, in plant training, debates, Technical seminars, quizzes, case studies, innovative projects, and participation in smart India hackathon are some of the means utilized by the Departments to provide experiential and participative learning.

Experiential Learning:

Mini Projects, Internships, Final Semester Projects, innovative projects and smart India hackathon are essential elements of each programme.Students will gain hands-on experience in an industrial environment during internship and industrial projects by means of solving real time problems.

During laboratory courses faculty members make effort to expose the students to practical experiments related to various courses in the curriculum.

Participative Learning:

Different methodologies that include Individual Based, Team Based and Project based are used to accelerate the learning process. Interaction and participation of students are seen to grasp concepts better and faster.

File Description	Documents
Upload any additional information	View File
Link for additional Information	Nil

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

ICT-enabled technologies and online resources are employed in the teaching-learning process to help students to improve their learning abilities. It allows monitoring of students' learning processes through online quizzes, online assignment submission, and so on. Google Classroom, WhatsApp learning group & online Zoom and Google meet platforms are used to effectively manage the teaching learning process.

Google Spreadsheet is created for different process related to teaching and learning process to enhance the data collection and processing. Link will be shared with faculty members and faculty members upload their student's attendance, internal assessment marks, tutorial and assignment presentation scores on the course and class they taught.

Google spread sheet and Google forms are also used to assess the various students outcome like students feedback on teachers, course end survey and exit survey. The course outcome attainment processes are simplified after the use of Google spread sheets.

General ICT Tools used by the faculties are:

- Desktop and laptops, Projectors, Printers, Photocopiers, tablets.
- Surprise quizzes encourage class preparation, attendance and, ensure the students to participate in class discussion designed to reinforce learning.
- Smart Classroom, NPTEL Videos, Virtual labs.
- Zoom and Google meet platforms.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	Nil
Upload any additional information	View File

2.3.3 - Ratio of students to mentor for academic and other related issues

2.3.3.1 - Number of mentors

174

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	View File
Circulars with regard to assigning mentors to mentees	View File

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The academic calendar includes the reopening dates, continuous internal assessments/ cycle tests, model exams for theory and practical courses, schedule for project reviews. The academic schedule given by Anna University for affiliated college is followed for third and final year students. Academic schedule prepared for autonomous batches is followed for first and second year students. Due to covid-19 pandemic the academic schedules prepared was changed based on the guidelines given by government of Tamilnadu and Anna University.

Faculty were instructed to prepare a detailed course plan for the theory and laboratory courses to be handled by them at the beginning of the semester containing weekly teaching contents, tutorials / assignments/presentations/ quizzes planned to conduct, The various Outcome Based Education related parameters like Course objectives, course outcomes, CO-PO-PSO mapping, blooms taxonomy levels are also included in the course plan.

For the courses taught by multiple faculty members a common course plan was prepared with the discussion and participation of all the faculty members handling the particular course.

The syllabus coverage, change in academic schedule, additional arrangements to be made for the coverage of syllabus are discussed in the course committee meeting, department faculty meeting and HoDs meeting

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

204

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	View File
Any additional information	**No File Uploaded**

2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

63

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	View File
Any additional information	View File

2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

2010

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	View File
Any additional information	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

56.5

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	View File
Any additional information	View File

2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

3

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	View File
Upload any additional information	View File

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

The Office of Controller of Examinations of Velammal Engineering College is striving hard to bring the Examination Reforms by means of improving Examinations procedures, integrating tools of Information Technology (IT) and by incorporating continuous Internal Evaluation Component. There has been several positive impact of reforms on the examination procedures and the examination processes are run through a indigenous software called "Rovan EMS". The digital process flow consist of Student Registration, Pre- Examination, Post – Examination, Revaluation, review and graduation.

The integration of IT has modernized the entire examination process and has speeded up the functioning mechanism, while making the whole process more transparent and to ensure error free examination system.

Apart from End Semester Examinations (SEE), students are evaluated through Continuous Assessments (CIE) by individual departments. Continuous Internal Assessments are conducted for every courses of a particular Degree program in a centralized manner by Internal Exam Cell. The office of the Controller of Examinations maintains its constant touch through various meetings with the Heads of various academic departments, Deans, and Principal for smooth and up to date functioning of the examination system of the college.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	Nil

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

Course outcomes for all the courses, Program Outcomes, Program Specific Outcomes and Program Educational Objectives for all the programs are clearly formulated, specified, disseminated to all the stakeholders and published in the institute website.

The importance of COs, POs, PSOs and PEOs are highlighted to faculty members and students. Faculty members participated in the various FDPs, seminars and workshops related to Outcome Based Education, training programs conducted in the department levels and get trained about the importance of the OBE. The formation of COs, Booms Taxonomy level, CO-PO-PSO mappings and its evaluation are discussed in the department level meetings.

The institution uses the following mechanism to convey learning outcomes to teachers and students. The learning outcomes are conveyed to students through Orientation programmes and starting of each course. Detailed curriculum, course outcomes, program outcomes, Program Specific Outcomes and assessment methodology for each course explained and given to students.

Links

http://velammal.edu.in/mechanical-engineering-me/

http://velammal.edu.in/computer-science-and-engineering-cse/

http://velammal.edu.in/

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	View File
Upload any additional information	**No File Uploaded**
Link for additional Information	**Nil**

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

Course outcome attainment

- **Internal assessment question papers are framed with blooms level and relevant COs are included.**
- **After the tests are conducted, the papers are evaluated and marks are used to assess the**

CO attainment

- **Apart from the internal marks, other assessment tools such as assignments, seminars, quiz, laboratory tests, tutorials and oral testsare used to evaluate the COs**
- **After the university examination results are published, the grade points obtained by the students are also considered for CO attainment.**

PO and PSO Assessment Methods

The POs and PSOs are evaluated by direct and indirect assessment methods.

Weightage: 80% for direct assessment and 20% for indirect assessment

- **Direct Assessment**

At the end of every semester, the course outcome attainment for all the courses are calculated as described in the CO attainment process. At the end of the program, i.e., after all the courses are completed, PO and PSO attainment levels for a particular batch are evaluated based on the Course Outcomes attainment of all the courses through CO-PO-PSO mapping.

- **Indirect Assessment**

The exit survey collected from all the students at the end of the program and the co-curricular & extracurricular activities of the students are considered for indirect assessment.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	Nil

2.6.3 - Pass Percentage of students

2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

814

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	[View File](#)
Upload any additional information	[View File](#)
Paste link for the annual report	Nil

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

https://velammal.edu.in/wp-content/uploads/2022/10/2.7.1-2020-21-Exit-Survey_13.10.2022.pdf

RESEARCH, INNOVATIONS AND EXTENSION	

3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

In serving faculty and administrators at the Institution and to assist in preparing and submitting proposals for sponsored project funding and managing sponsored research funds.Some of priorityareas to match with 12 th five plan of Government of India are identified, including Agriculture;

Water; Energy; Environment and Health. The designator Dean (R&D) is the steering leader for allthe research activities that are being carried out at the Institution. Individual Research Council (RC)from each department identifies thrust/niche areas and directs each cluster to pursue multi- disciplinary and inter-disciplinary research projects. The clusters are attached with relevant RC andcarried out research projects. Cluster labs pertaining to the Research Council are initially to beformed by attaching existing research labs to relevant Research Councils. Equipment purchases arefunded by research grants of individuals, departments, research groups or institutions.

Research labsare setup from various sources of funding.The futuristic laboratories in the area of, Machine learning, Networked autonomous system, Big dataand Cloud computing will be established through Industrial collaborations and funds to be receivedfrom various government agencies.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	[View File](#)
Provide URL of policy document on promotion of research uploaded on the website	https://velammal.edu.in/wp-content/uploads/2022/10/Research-Policy.pdf
Any additional information	[View File](#)

3.1.2 - The institution provides seed money to its teachers for research

3.1.2.1 - Seed money provided by the institution to its teachers for research during the year

(INR in lakhs)

0.5

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	View File
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	No File Uploaded
List of teachers receiving grant and details of grant received	View File
Any additional information	No File Uploaded

3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

0

File Description	Documents
e-copies of the award letters of the teachers	No File Uploaded
List of teachers and details of their international fellowship(s)	No File Uploaded
Any additional information	No File Uploaded

3.2 - Resource Mobilization for Research

3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

104.75426

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	View File

3.2.2 - Number of teachers having research projects during the year

21

File Description	Documents
Upload any additional information	**View File**
Paste link for additional Information	**Nil**
List of research projects during the year	**View File**

3.2.3 - Number of teachers recognised as research guides

23

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	**View File**
Institutional data in Prescribed format	**View File**

3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

8

File Description	Documents
Supporting document from Funding Agencies	**View File**
Paste link to funding agencies' website	**Nil**
Any additional information	**View File**

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

Innovation & Startup policy of Velammal Engineering College mainly empowers the product development-oriented activities in the Institution.To foster an interest in invention, innovation, and an

entrepreneurial lifestyle among the students the Startup Lab shallhost a series of workshops and events like faculty-led competition on innovation in which students develop and present their inventions, seminars by expert people or experienced entrepreneurs to share their experiencethat could help totransform students' promising ideas into successful products.Product Development Competition is a chance for students to take all of the skills and knowledge learned in the institution and applies them to a real-world situation.Each participating students' team develops a new product idea and carries the concept through marketing and production, much like a commercial product development team. The Startup Lab is committed to providing students with access to the best minds in entrepreneurship. Guest speakers of exceptional entrepreneurial achievement visit the Startup Lab on a regular basis, building relationships among entrepreneurs, angel investors (provides capital for a business) and students. Such relationships support and nurture innovation and entrepreneurial skill among the student community of the institution.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	Nil

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

8

File Description	Documents
Report of the events	No File Uploaded
List of workshops/seminars conducted during the year	[View File](#)
Any additional information	No File Uploaded

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research	A. All of the above

Ethics in the research methodology course work Plagiarism check through authenticated software	

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	View File
Any additional information	**No File Uploaded**

3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

72

File Description	Documents
URL to the research page on HEI website	**Nil**
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	**No File Uploaded**

3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

0.387

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

3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

0.196

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	**Nil**

3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

3.4.5.1 - Total number of Citations in Scopus during the year

40

File Description	Documents
Any additional information	[View File](#)
Bibliometrics of the publications during the year	[View File](#)

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

3.4.6.1 - h-index of Scopus during the year

4

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	[View File](#)
Any additional information	**No File Uploaded**

3.5 - Consultancy

3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

0.30

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View File
List of consultants and revenue generated by them	View File
Any additional information	View File

3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

nil

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	**No File Uploaded**
List of training programmes, teachers and staff trained for undertaking consultancy	**No File Uploaded**
List of facilities and staff available for undertaking consultancy	**No File Uploaded**
Any additional information	**No File Uploaded**

3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Velammal Engineering College encourages the students to participate in various extracurricular activities like NSS, NCC and YRC. Our college makes the students strong both physically and mentally. Our students are very enthusiastic when doing social activities like tree plantation, social awareness program, medical camp etc.

Every year YRC serving 'Nilavembu Kashayam' to students and staff to take care of their health in monsoon period where 'Dengue' fevers catches more. And, every year YRC and NSS jointly conducting Blood Donation Camp to help the human community and

their lives. Also, we are conducting health campaign like 'Eye Camp', 'First Aid Awareness Camp' etc., Lake cleaning, Orphanage home visit and Old age home visit is also one of the best extension activities of our students.

NCC volunteers activities are, Swatch Bharat, Anti plastic rally, beach and water bodies cleaning activities etc.

Our Velammal Engineering College has accepted and hand over Hostels and Classrooms to Covid Care Centre, Chennai Corporation, Tamil Nadu during COVID-19 Pandemic period.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	Nil

3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

6

File Description	Documents
Number of awards for extension activities in during the year	[View File](#)
e-copy of the award letters	[View File](#)
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

12

File Description	Documents
Reports of the events organized	[View File](#)
Any additional information	[View File](#)

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

1373

File Description	Documents
Reports of the events	View File
Any additional information	View File

3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

373

File Description	Documents
Copies of documents highlighting collaboration	View File
Any additional information	View File

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

7

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	View File
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	View File
Any additional information	**No File Uploaded**

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 equipments, etc.

The institution provides admirable infrastructural facilities for the teaching-learning experiences and rolls-out value added programmes & activities like Technical & Non-Technical Clubs, Activity based learning, Laboratory oriented theory classes which

bridges the gaps in academic teaching and in par with industry requirements. The available physical infrastructure is optimally utilized beyond regular college hours to conduct certificate courses, co-curricular activities / extra - curricular activities, Campus Recruitment Training classes, campus recruitments, seminars, conferences.

Classroom: 66 Class Rooms are available and are equipped with all necessary ICT facilities to enhance the teaching learning process. The optimal utilization is ensured through encouraging innovative teaching – learning practices inside the Classrooms through well experienced teachers.

Laboratories: Spacious and well-furnished laboratories with good ventilation and lighting facilities are available. All laboratories are equipped with essential equipment to meet the requirements of the curriculum. Latest software & Tools are available to enable the students to work on their interest by participating in various technical clubs.

Seminar Hall: Seminar halls equipped with ultra-modern LCD projector, computer workstation, audio-visual facilities and Internet facilities.

Library: The Library is Spacious and well ventilated. The College Library is equipped with a large number of books and journals with Open access facility.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://velammal.edu.in/NAAC-assets/files/NAAC/2020-21/Criteria4/4.1.1-INFRASTRUCTURE.pdf

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

VEC strongly believes that a healthy body carries a healthy mind. Sports & Games play an integral part in the all-round development of the student. Keeping this in mind the institution has a definite policy and plan of action to encourage sports & games. The institute encourages students to participate in sports & games inside and outside the campus. Transport is provided to students

to participate events outside the campus. Constant support from the management towards sports and games considerably enhances the health of the students and relieving the tension. In our effort we won number of tournaments. We're having sufficient area for sports and playing area for our students and we constructed comfortable courts for both boys and girls. The environment is eco-friendly which helps healthy playing conditions.

File Description	Documents
Geotagged pictures	View File
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

72

File Description	Documents
Upload any additional information	View File
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

137.03

File Description	Documents
Upload audited utilization statements	View File
Details of Expenditure, excluding salary, during the years	View File
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

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

The Institute has a well established central library building. Library has a huge collection of Text books, Reference books and others books with foreign, peer-reviewed journals and bound volumes of journals. The reading room is well and provides conductive environment for study. A visitor record is maintained for students and faculty members, New Arrivals of books and journals are displayed on rack.

OPAC: The library has developed the database of its own collection through the library software. Library is fully computerized with barcode-based issue-and return process, online public access catalogue (OPAC) facility is made available in the central library. OPAC which is used students and faculty member for search of books by Title, Author, Subject name etc. e-Resources: Internet and reprography facility with computer system. CD's, DVD, CD-ROM databases, barcode scanner, printer are available in the library.

Library Automation: All the active book collection is update in the library software database and the online public access catalogue (OPAC) is available for students and faculty members. The issue and return of book have been activated in the library software.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://velammal.edu.in/NAAC-assets/files/ NAAC/2020-21/Criteria4/4.2.1-LIBRARY- INFRASTRUCTURE.pdf

4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources	A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	[View File](#)
Upload any additional information	No File Uploaded

4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

2.03

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

4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

4.2.4.1 - Number of teachers and students using the library per day during the year

383

File Description	Documents
Upload details of library usage by teachers and students	View File
Any additional information	View File

4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

Yes, the Institute has an IT policy which is updated or amended whenever required as per the need of the institute. Institution tries to have upgradation IT facilities as per the requirement by regulatory norms. Institution is regularly upgrading its infrastructure covering Wi-Fi, software upgradation, ERPsystem, ICT enabled teaching learning. Formal IT policy has been approved by academic council.The acceptable use of policies are applicable to Employees, Students, Vendors and Visitors. Institutes have framed various policies like Procurement, Installation of Hardware, Network and software. Website Hosting and Database Usage policy has its method and hierarchy which is followed systematically. Certain violations of IT policy by any member may even result in disciplinary action against the offender by institution authorities.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	**Nil**

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
2716	**850**

File Description	Documents
Upload any additional information	**No File Uploaded**

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus	**A. ?50 Mbps**

File Description	Documents
Details of bandwidth available in the Institution	[View File](#)
Upload any additional information	**No File Uploaded**

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing	**B. Any three of the above**

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	**Nil**
List of facilities for e-content development (Data Template)	[View File](#)

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

1136.82

File Description	Documents
Audited statements of accounts	View File
Upload any additional information	No File Uploaded

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

Velammal Engineering College has a well-framed infrastructure policy for proper maintenance and utilization of the physical, academic and support facilities. The responsibility for provisioning and maintaining infrastructure is jointly shared by different authorities of the Institution, under the overall leadership of the Management.

Established Systems and Procedures

The Principal discusses with the Planning and Evaluation Committee and presents a report regarding physical, academic and support facilities.The CEO is empowered to deal with all matters pertaining to the acquisition, up-keeping and disposal of campus infrastructure.

An annual audit and inventory of the facilities is undertaken for assessment and evaluation.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://velammal.edu.in/NAAC-assets/files/NAAC/2020-21/Criteria4/4.4.2-LIBRARY-PROCEDURE.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

1530

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	[View File](#)
Upload any additional information	**No File Uploaded**

5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

16

File Description	Documents
Upload any additional information	**No File Uploaded**
Institutional data in prescribed format	[View File](#)

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology	**A. All of the above**

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

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

2184

File Description	Documents
Any additional information	**No File Uploaded**
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	View File
Details of student grievances including sexual harassment and ragging cases	View File
Upload any additional information	**No File Uploaded**

5.2 - Student Progression

5.2.1 - Number of outgoing students who got placement during the year

613

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File

5.2.2 - Number of outgoing students progressing to higher education

19

File Description	Documents
Upload supporting data for students/alumni	[View File](#)
Details of students who went for higher education	[View File](#)
Any additional information	**No File Uploaded**

5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

22

File Description	Documents
Upload supporting data for students/alumni	[View File](#)
Any additional information	[View File](#)

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

8

File Description	Documents
e-copies of award letters and certificates	[View File](#)
Any additional information	[View File](#)

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

Representation of students Institute level

1. CLASS REPRESENTATIVE

Every class shall have Class representative (usually 1 boy and 1

girl) of the class concerned with the overall goal of improving the teaching learning process by representing problems experienced by students/suggestions to improve the existing system to the persons concerned / class incharge /mentor / HoD /Principal.

2. CLASS COMMITTEE

Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson who is not teaching the class. It is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching learning process.

The functions of the class committee include

- Representing problems experienced by students in class room and in the laboratories
- The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.

3. Placement Coordinators

4. Club coordinators –members

- Coders cub
- Innovators Club
- Maths club
- Literary club

4. NCC,NSS and YRC coordinators –members

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

5.3.3 - Number of sports and cultural events / competitions organised by the institution

7

File Description	Documents
Report of the event	View File
List of sports and cultural events / competitions organised per year	View File
Upload any additional information	No File Uploaded

5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

Velammal Engineering College has got a very fine strength of Alumni who are pursuing their career worldwide. Alumni are always welcomed to college to share their views in pursuing higher studies or career and give suggestions for the betterment of their junior students. This provides an opportunity for the juniors to set right their goal. The alumni often visit the college during their available time and the need of the juniors institution to deliver Guest lectures and seminars for the students in their areas of expertise and motivate the young minds. Through E Cell activities alumni who are entrepreneurs are invited to share their success stories at various occasions of the Institute. During placements alumni conducts GD and mock interview for shaping up the juniors to fair well in their placement process.

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	Nil

5.4.2 - Alumni's financial contribution during the year	**C. 5 Lakhs - 10 Lakhs**

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

VISION:

To educate the student community both by theory and practice to fit in with the society and to conquer tomorrow's technology at global level with human values through our dedicated team.

MISSION:

To provide world-class education in engineering, technology and management to foster research & development, encourage creativity, build leadership, intrapreneurship, entrepreneurship, nurture teamwork and achieve stake holder's delight.

The college, founded by Shri M.V.Muthuramalingam, Velammal Educational Trust, has a structured and transparent administrative system.

The Chief Executive officer of Velammal Educational Trust, Shri M.V.M. Velmurugan, formulates and administers the strategic policies for realization of the objectives of the college.

The Management Committee, Governing Body, Finance Committee, Academic Council, and Board of Studies, including nominees of AICTE and Anna University, are the statutory bodies of the institution which are responsible for strategic planning and decision making.

Under the able leadership of the principal, the institution has made remarkable progress in academics, research, placement, and infrastructure. It has greatly contributed to environmental sustainability and displayed strong commitment to social development which is in line with the vision and mission of the institution. The principal conducts periodic meetings with the heads of departments and faculties for planning, evaluation, follow-up and up-gradation.

The Principal is the academic head and the primary decision-making authority. The Vice Principal coordinates hostel, finance and autonomous examinations.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	Nil

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The Management Committee, in consultation with the Governing Body, formulates strategic plans, devises policies, and ensures successful implementation.

The Principal adopts and practises a policy of decentralisation through a delegation of duties and responsibilities. Authority entrusted on the Heads of the Departments to manage day-to-day operations.

Anti-ragging Committee, Disciplinary Committee, Students' Grievances Committee, Women Empowerment cell, Placement and Career Guidance, Entrepreneurship Development Cell, College Day, Calendar and Newsletter Committees have been duly constituted with faculties as Office Bearers, and students and other stakeholders as its members, thereby, making it participatory in nature.

Faculty representatives of the committees, along with the student representatives are involved in decision-making. Need-based and society-oriented academic programmes and courses are designed at the department level which is followed by seeking the management approval.

The Principal, Heads of departments and faculty members have been collaborating to launch new initiatives that aim at skill development, value added courses and employability enhancement courses through Memorandum of Understanding with National institutions/bodies. The effective leadership and participatory management are a testament to the successful decentralisation policies and practices of the institution

File Description	Documents
Upload strategic plan and deployment documents on the website	**No File Uploaded**
Upload any additional information	View File
Paste link for additional Information	**Nil**

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

In the year of 2020-21, to meet the demands of IT companies, Artificial Intelligence and Data Science course is introduced. This Course covers the current trends in artificial Intelligence and Data Science which meets the needs of company.

To enrich the research activities, nearly 2 patents are registered through DST sponsored Innovation and Entrepreneurship Development Cell(IEDC).

20 IEDC projects are selected this academic year 2020-21.

TEACHING PEDAGOGY

Technology has changed the possibilities within teaching and learning. Digital education is the term used to refer to all online educational practices. It includes lecture modules with text, quiz, assignments, case studies, references. We encouraged our students to do online internships and also conducted guest lectures, workshops, case studies etc. During Pandemic VEC had conducted Virtual labs and webinars apart from regular classes.

File Description	Documents
Strategic Plan and deployment documents on the website	**No File Uploaded**
Paste link for additional information	**Nil**
Upload any additional information	View File

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

The College is managed by Velammal Educational Trust. The organisation structure of the institution is explicitly in line with the norms and stipulations laid down by the UGC and the affiliating body - Anna University.

The Management Committee formulates the strategic policies, plans and decisions for the overall development of the institution and to achieve global standards with quality academia, research and social commitment.

The Governing Body acts as a major role for the effective implementation of the strategic plans and decisions. The Governing Body is also involved in the decision-making process of matters pertaining to finance and administration, working towards the developmental goals set by the institution.

The Principal is entrusted with the sole responsibility of academic, examination and administrative operations, ably assisted by the heads of departments, teaching, administration staff and IQAC.

Hostel , Controller of examinations and maintenance activities are maintained by Vice Principal. Policies, plans and budgets proposed by the Statutory Committees such as the Academic Council are routed through the Finance Committee for the approval of the Governing Body.

The Controller of Examinations is assigned the authority and responsibility for the entire process of examinations from registration to results, including grievance redressal.

File Description	Documents
Paste link to Organogram on the institution webpage	**Nil**
Upload any additional information	<u>View File</u>
Paste link for additional Information	**Nil**

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination	A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	No File Uploaded
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	No File Uploaded

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

Faculties :

- Institution encouraged to pursue their part-time Ph.D.'s Course work in the college with a fee concession.

  Institution grants "ON-DUTY" permission for professional development programmes like conference and other training Programmes like FDP, STTP, Seminar and Workshop.

  Institution grants "ON- DUTY" permission for valuation and other university affiliated works.

  ESI, EPF, Medical facilities, Transport, Tuition fee concession to the children.

Non Teaching Faculties:

- ESI, EPF, Medical facilities, Transport, Tuition fee concession to the children, Work related facilities.

- Staff under Grant in Aid Scheme are covered by Provident Fund and Contributory Pension Scheme.

Official Welfare Measures:

- Internet facilities are made available to staff.

  All blocks/buildings of the campus provided with ramps / elevator

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

183

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

13

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	View File
Upload any additional information	View File

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

116

File Description	Documents
Summary of the IQAC report	**No File Uploaded**
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View File
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

The Tuition Fee is collected through the administrative department and deposited in a unique bank account whichis used for the various administrative and academic expenses. The institution provides additional facilities like hostel, transport, food, exam fees etc. and the respective fee collected are used for the expenses under appropriate head.

A yearly budget is prepared strategically with the composition of pay allowances, recurring nonrecurring expenses and regular maintenance establishment expenses. This estimated budget is well monitored periodically, and the account statement is prepared at the end of the academic year.

The College Office and Accounts Officer in trust maintain accounts, receipts and payments, cash books, cheque books, cheques issue register and vouchers and bills for financial transactions. The Finance Committee deliberates on financial management, resource mobilisation and utilisation for Controller of Examination accounts. All other college expenses are discussed and approved in Governing body meeting.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	**Nil**

6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

0

File Description	Documents
Annual statements of accounts	**No File Uploaded**
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	**No File Uploaded**
Any additional information	**No File Uploaded**

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

Mobilisation of funds is very important as it provides the faculties to showcase their expertise to various agencies of Government of India and various industries. It is monitored by the head of the institution and the respective Department Head of the Department.

The sources of funds are

(a)Tuition fee

(b) Consultancy activities and revenue earned

(c) Sponsored projects

(d) Funds collected from IEDC and other resources for doing projects

(e) Management.

Governing body approves the funds allotted. Finance committee will audit and approve the funds for autonomous Examination related works. Faculty can apply and utilize research funds from various agencies like DST, AICTE, UGC.

File Description	Documents
Upload any additional information	**No File Uploaded**
Paste link for additional Information	**Nil**

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The goal of IQAC is to enhance and ensure the quality of academic and administrative performance of the institution by developing a system of conscious, consistent and continuous quality improvement.

During Pandemic, Faculties were encouraged to use Online mode of education and conduct classes through LMS platforms such as Google Meet and Zoom. Students are encouraged to access information from online resources and augment their knowledge beyond classroom learning. Administrative work is automated from admission process to maintaining student's information, attendance, examinations and publication of results. During the pandemic, the End Semester Examinations were conducted online proctored through a dedicated software WHEEBOX and the evaluation of the answer scripts was also carried out online through the software. The entire process was managed efficiently and effectively.

Velammal Engineering College excels this year by contributing research paper, research Projects and patents. Nearly 10 IEDC projects of 2019-20 are converted as patents in 2020-21. 20 New projects of different departments were selected for IEDC projects worth Rs. 20 lakhs. Nearly 25 research papers were published in various SCI, Scopus and UGC Indexed Journal.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	**Nil**

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

Teaching Learning Review Process :

In PAC meeting the following points discussed

- **Review the attainment of POs/ PSOs and action plans proposed for further improvement.**
- **Review the results of the 2019-20 academic year and propose the actions to improve the result**
- **NBA accreditation – Status of NBA accreditation work discussed**
- **Review of Industry – Institute Interaction done**
- **Review of Placement, Higher Studies and Entrepreneurship**
- **Students participation in Outside state for CoCurricular and Extracurricular insisted.**

Teaching learning process are reviewed under academic audits and external audits like ISO.

In BOS meeting, curriculum enrichment suggested and discussed by BOS committee members.

Various online courses, new online pedagogy techniques to implement for various courses will be discussed and planned.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	**Nil**

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)	**A. Any 4 or all of the above**

File Description	Documents
Paste the web link of annual reports of the Institution	**Nil**
Upload e-copies of accreditations and certification	[View File](#)
Upload details of quality assurance initiatives of the institution	[View File](#)
Upload any additional information	**No File Uploaded**

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 year

For the purpose of engaging young female students, the Women Empowerment Cell arranges Women Empowerment lectures, awareness events, and other contests. Every class elects a female student to serve as the class representative. To promote women leaders, the female faculties are appointed as heads of various departments, cells and clubs. Girl students are encouraged to participate in NSS and NCC to serve the society and the country. The girl students are encouraged to actively participate in curricular, co-curricular as well as extracurricular activities.

Safety and security:

- **Hostel and college premises have 24 x 7 security support with CC TV monitoring.**
- **Daily Attendance system is followed for monitoring the hostel female students and staff members. If absenteeism is noticed, it will be intimated to the parents after due verification.**
- **For fitness of girls, a separate gym and sports facility with high-quality equipment are available in hostels in addition to regular facility.**

- **A students' counseling cell functions for helping students at times of their grievance, apart from the class advisors and academic coordinators.**

- **The health centre has rooms with cot facility, one consulting room and one waiting room for students to take**

rest on being unwell.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	**Nil**

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment	**A. Any 4 or All of the above**

File Description	Documents
Geotagged Photographs	[View File](#)
Any other relevant information	**No File Uploaded**

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

SOLID WASTE MANAGEMENT -There are dustbins placed at specific points to prevent littering in the campus. Dry leaves are allowed to degrade over time in order to be used as manure in the institute's gardens. In the Ladies Hostel, separate containers are provided to separate napkins from other rubbish.

LIQUID WASTE MANAGEMENT -Sewage treatment plant is available to treat the liquid waste. A screening chamber and an aerator which supplies oxygen in the aeration tank for effective growth of microbes, secondary settling tank to remove the bio flocs and chlorination tank to destroy the pathogenic microbes in the treated effluent are installed in the campus and properly maintained.

E-WASTE MANAGEMENT

E-waste approach has gained proper attention, and all electronic items are put to the best possible use. Minor repairs are performed by the staff and Laboratory assistants to correct the equipment, and major repairs are performed by expert technicians and reused. Electronic waste items are taken care by the Institute.

WASTE RECYCLING SYSTEM

The wastewater from the restrooms and toilets are collected and this collecting system makes sewage treatment and disposal more efficient and effective. The treated water is used in the garden.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	**No File Uploaded**
Geotagged photographs of the facilities	[View File](#)
Any other relevant information	[View File](#)

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus	**B. Any 3 of the above**

File Description	Documents
Geotagged photographs / videos of the facilities	[View File](#)
Any other relevant information	[View File](#)

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows: 1. **Restricted entry of automobiles** 2. **Use of bicycles/ Battery-powered vehicles** 3. **Pedestrian-friendly pathways** 4. **Ban on use of plastic** 5. **Landscaping**	**A. Any 4 or All of the above**

File Description	Documents
Geotagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	**No File Uploaded**
Any other relevant documents	View File

7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

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

D. Any 1 of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	**No File Uploaded**
Certification by the auditing agency	**No File Uploaded**
Certificates of the awards received	**No File Uploaded**
Any other relevant information	View File

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance,

C. Any 2 of the above

reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	View File
Policy documents and brochures on the support to be provided	**No File Uploaded**
Details of the software procured for providing assistance	**No File Uploaded**
Any other relevant information	View File

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

VEC caters to a diversified environment in terms of culture, geography, languages, community, economic, and other features, and is a strong supporter for diversity in a variety of ways.

CULTURAL DIVERSITY

VEC accommodates the culturally diversified students by encouraging the exchange of cross-cultural ideas and celebration of the festivals of different culture.

REGIONAL DIVERSITY

Apart from students from Tamil Nadu's different districts, the institute also has students from other Indian states.Students from all areas are given equal opportunities to participate in co-curricular activities such as clubs and cells, as well as extra-curricular activities like as sports and cultural events.

LINGUISTIC DIVERSITY

To bridge the gap between region-specific teaching and the expectations of students and faculty in other states, English is used as a medium of instruction in all courses.

COMMUNAL DIVERSITY

This institute welcomes students and staff from all cultures and religions, demonstrating that the institute attempts to offer a

welcoming atmosphere for everyone.

SOCIO ECONOMIC DIVERSITY

Students from rural areas and low-income families attend the institute to study. To help students overcome socioeconomic challenges, the institution has helped them get scholarships and awards from state and central governments.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

The values are inculcated through courses in the curriculum,namely Universal Human Values and Professional Ethics & Human values. Through NSS, NCC, and other clubs, various programs are organized to make the students realize their rights, duties and responsibilities. The various programs organized are:

§ Environmental awareness programs like guest lectures, rally, competition, planting trees, campus cleaning, plastic usage awareness programs

§ Blood donation camps by NSS and other clubs

§ Camps for enrolment of voter ID for the students made them aware of their rights and duties.

§ Village adoption programs to understand the live hood of village and made our students to understand their responsibilities.

§ During natural disasters, students are permitted to collect funds/ materials and distribute them to the affected people

Independence Day, Republic Day and Constitutional Day are celebrated to create awareness among the students about our Constitution, freedom struggle and our nation's history.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	[View File](#)
Any other relevant information	[View File](#)

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized	**A. All of the above**

File Description	Documents
Code of Ethics - policy document	[View File](#)
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	[View File](#)
Any other relevant information	**No File Uploaded**

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

- **VEC provides outstanding supports towards celebrating national and international commemorative days, events, and festivals. Various cells and clubs are active in VEC for the benefit of students' community. These clubs and cells join together and celebrate various events; like, National-level events such as Independence Day, Republic Day, Teacher's Day, Gandhi Jayanti, Engineers Day, National Unity Day, Armed Forces Flag Day, NSS Day, NCC Day, International Yoga Day, International Women's Day, World Environment Day, Science Day, World Youth Day, World Water Day, World**

Population Day, and so on.

- National events such as Republic day and Independence Day aid to increase the unity among the students, promote the feelings of pride of our own country, which helps to raise the patriotic spirit among young minds.
- National and international leaders/scientists' commemorative days are celebrated to acknowledge their contribution towards the nation/society and to make students be aware of their services.
- Manyprograms are organized and celebrated to create the awareness to students on environment, physical and mental health, gender equality, national services, to know, protect and practice their citizenship rights, to give them knowledge about do's and don'ts.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	View File
Geotagged photographs of some of the events	View File
Any other relevant information	No File Uploaded

7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

1. TEACHING PEDAGOGY: Technology has changed the possibilities within teaching and learning. We encouraged our students to do online internships and also conducted guest lectures, workshops, case studies etc. During Pandemic VEC had conducted Virtual labs and webinars apart from regular classes.

2. CURRICULAR & CO-CURRICULAR ENRICHMENT PROGRAMME :We encourage our students to participate in the Codeathon competition, a coding challenge where participants solve problems and code as per the given specifications. We encourage our students to participate in sports and our students are the winners for various events.

3 RESEARCH -NewGen IEDC: NewGen IEDC is operating in 5000sqft area with good infrastructure. A maximum of twenty new projects would be supported in a year. The projects are students' projects with a high degree of innovation and commercial viability to lead to

possible startup by students. This helps to foster culture of entrepreneurship amongst students.

4 INSTITUTION INNOVATION COUNCIL – IIC: Help students and teachers turn their ideas into workable prototypes by mobilizing resources, dedicated work spaces, and seed financing. Encourage student innovators to engage in hackathons, demo days, and design competitions, and link them with mentors in both technology and business.

File Description	Documents
Best practices in the Institutional website	https://velammal.edu.in/wp-content/uploads/2022/10/7.2.1-%E2%80%93-Best-practices-20-21.pdf
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

VEC admits students from all sections of the society and offers holistic education.

The Institute with its distinctive approach has a very well governance structure and administrative mechanisms to ensure quick implementation of programmes.

Over the years, the Institution has created and organized a number of outreach proogrammes that have impacted the social lives of students and staff members. The programmes emphasize the importance of organising various educational and awareness programmes to help students become self-reliant, skilled, and enthusiastic in order to confidently complete their tasks and face the challenges of a rapidly changing world, such as striving for academic excellence in learning and creative practical thinking.

New Gen IEDC of VEC aims encourage students to take up innovative projects with possibility of commercialization. A maximum of twenty new projects would be supported in a year.

Students who are having difficulty meeting academic milestones are given extra help in the form of remedial classes, regular mentorship for all students, and counseling for those who require it.

Value education and professional ethics courses were conducted to enlighten the young minds about the importance of practicing moral and ethical values in personal, professional, and social settings.

File Description	Documents
Appropriate link in the institutional website	https://velammal.edu.in/wp-content/uploads/2022/10/7.3.1-VEC-Institutional-Distinctivenss-2020-21.pdf
Any other relevant information	View File

7.3.2 - Plan of action for the next academic year

Enhancement of quality research in journals like SCI, Scopus indexed and UGC listed and industrial collaborations by signing MOU's. Enhancethe teaching learning process withthe utilizationof ICT in teaching. Inspire & encourage more staff members to participate in applying and getting more funded projects and consultancy work. Enhance the skill sets of students by conducting value added courses and encourage more students to involve in research related activities and to inculcate startup culture among students this helps to improve the number of startups within the incubation cell. Improve the NIRF ranking of the institution and sustaining NBA accreditation. Engage in training for competitive examinations and inspiring students to try for higher studies and participate in smart India Hackathon and design competitions. Arranging placement training for the students and getting them placed in core companies & others with a mean salary of 5 lakhs and above.