



**Mahatma Education Society's
Pillai College of Engineering
Dr. K. M. Vasudevan Pillai Campus, Sector16,
New Panvel, Navi Mumbai (M.S.) 410206**

**INFORMATION FOR
ACADEMIC AND ADMINISTRATIVE AUDIT
OF THE DEPARTMENT
(2018-2019)**

1. Name of the Department : **Automobile Engineering**
2. Year of establishment : 2009-10
3. Programmes offered : UG
4. Details of certificate/diploma program introduced in the last academic year:

SN	Program code	Program name	Name of the certificate/diploma introduced in last 5 years	Year of introduction	Link the relevant document
1	AE	Automobile Engg	CREO For Design Engineers through IFSA	2018-19	
2	AE	Automobile Engg	Training Course CATIA V5 Mechanical Designer through IFSA	2018-19	
3	AE	Automobile Engg	Solid Works	2018-19	
4	AE	Automobile Engg	Automotive Research and Development	2018-19 (17 th -19 th Sept 2018)	PIP ARAI 18
5	AE	Automobile Engg	Basics of Automotive Graphic design	2018-19 (March-June 2019)	report Auto design workshop

5. Details of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council:

Academic Year	Name of Faculty	Name of the body in which full time teacher participated	Subject	Level/ Semester	Relevant Link
2018-19	Dr. Divya Padmanabhan	Chairman and Member, Question Paper Setting Committee, University of Mumbai		I,III,VI, VII,ME sem1	
2018-19	Prof. Amey Marathe	Chairman and Member, Question Paper Setting Committee, University of Mumbai		VI,IV	
2018-19	Dr. Basavraj S Talikoti	Member, Question Paper Setting Committee, University of Mumbai		III,IV	
2018-19	Prof. Manoj Sharma	Avishkar Research Convention	Project Presentation	PG	

(University appointments are confidential and available with all the faculty mentioned above)

6. Details of new Courses introduced of the total number of courses across all Programmes offered by the department:

Name of the new course introduced in last A.Y.	Program name	Program code	Course code	Year of introduction	Link the relevant document
Mechanical Measurements and Control	Undergraduate Automobile Engineering	AE	AEC502	2018-19	Syllabus AUTO CBC
Automotive Systems			AEC504	2018-19	
Internal Combustion Engines			AEL501	2018-19	
Mechanical Measurements and Control			AEL502	2018-19	
Heat Transfer			AEL503	2018-19	
Automotive Systems			AEL504	2018-19	
Manufacturing Sciences Lab			AEL505	2018-19	
Press Tool Design			AEDLO5011	2018-19	
Machining Sciences and Tool Design			AEDLO5012	2018-19	

Design of Jigs and Fixtures			AEDLO5 013	2018-19	
Chassis and Body Engineering			AEC601	2018-19	
Chassis and Body Engineering			AEL601	2018-19	
Machine Design I			AEL602	2018-19	
Finite Element Analysis			AEL603	2018-19	
Mechanical Vibrations			AEL604	2018-19	
Mechatronics Lab			AEL605	2018-19	
Automotive Materials			AEDLO6 023	2018-19	

7. Details of the programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented:

Name of all programs	Whether adopting CBCS course system (yes/no)	Whether adopting elective course system (yes/no)	Program Code	Year of implementation of CBCS/ elective course system	Link the relevant document
Bachelor of Automobile Engineering	yes	yes	AE	2016-17	Syllabus AUTO CBC

8. Details of students enrolled in subject related Certificate/ Diploma programs/ Add-on programs:

Year	Title of the programme	Type of the programme (Certificate/ Diploma programs/ Add-on programs)	Total Number of students enrolled in certificate or diploma or add-on programs
2018-19	Solid works tutorials in MES E-learning channel	Add-on	Available on the web for free
2018-19	Training Course CATIA V5 Mechanical Designer	Certificate	57+19(15+4*)
2018-19	Creo for Design Engineers	Certificate	15(5*)

2018-19	3 Day Proficiency Improvement Programme on Automotive Research & Development	Certificate	118
2018-19	One day training workshop on CFD	Certificate	48(12*)
2018-19	Handling Emergencies & First Aid Techniques	Certificate	90
2018-19	NPTEL	Certificate	1
2018-19	Solidworks workshop	Certificate	18(3*)

* students from Automobile Engg Dept

9. Details of value added courses imparting transferable and life skills:

SN	Name of the value added courses (with 30 or more contact hours) offered during last five years	Course Code	Year of offering	Year of discontinuation	Number of students enrolled in the year	Number of students completing the course in the year
1	Training Course CATIA V5 Mechanical Designer through IFSA	CATIA-V5	2018	-	76(19*)	76(19*)
2	CREO For Design Engineers through IFSA	CRDE	2018	-	15(5*)	15(5*)
3	Workshop of Basics of Automobile Graphic Design	BAGD	2019	-	42	42

10. Details of the students undertaking field projects/ internships:

Program name	Program code	No of students undertaking field projects / internships	Link the relevant document
Bachelor of Automobile Engineering	AEINT	87	<u>List of Students</u>
Multidisciplinary Field projects-Vanguard	All Programs	29	https://drive.google.com/open?id=1ijcBA2_E6oo6mmVhjSKg6FEgFMNePcv9
Multidisciplinary Field projects-Spark	All Programs	25	https://drive.google.com/open?id=1ijcBA2_E6oo6mmVhjSKg6FEgFMNePcv9

11. Analysis with action taken report of feedback received from different stakeholders i.e. Students, Alumni, Employer and teachers.

SN	Stakeholder	Department	Feedback Received	Action Taken	Link for Document
1	Teacher	Automobile Engg	Timely coverage of syllabus is not possible in the mentioned number of hours in syllabus(Sem V MMC)	First two weeks of 2019-20 planned to be all theory with an one hour additional for all courses.	
			More Emphasis should be on Practical Learning(SEM V AS)		
			The modules 3-6 (based on general theory of machines) don't sequence properly with the modules 1-2 (Mechanical Vibrations). There seems to be mis-match in the flow of contents, and hence the discontinuity.(SEM VI DOM)	Will be communicated to BoS,MU	
2	Employer	Automobile Engg	Internship provides an arena for the employment to the student after completion of the course. Because of heavy curriculum or short span of time available in between semesters, they can't undergo internship for sufficient number of days. Curriculum design should ensure that the students should undergo internship for minimum	At the institute level, a duration of two week is provided to the students in between the semester for undergoing	

			of 3 months.	internship.	
3	Students	Automobile Engg	Unable to understand operation of simple work-piece	Video lecture arranged	
			Difficult to Identify and select locating and clamping points on work-piece	Concepts cleared with extra examples	
			Demonstration of construction of drill jig is difficult	PPT shown to explain	
			Unable to understand construction of milling fixture	PPT shown to explain	
			Very less content is shown in class on combination of tools, jigs and fixture, suitable for a particular machining operation	Video lecture arranged	
			Design of assembly of jigs and fixtures on simple work-piece is difficult	Two examples of design taken	
			Difficult to analyse heat generation in machining operation and coolant operations	Taught the subject using PPT	
			Demonstration of interrelationship between cutting parameter and machining performances measures like power requirement , cutting time, tool life and surface finish is not clearly understood	Tentative Question bank given to make easy and simple	

12. Number of students from other States and Countries admitted in the department:

Year of enrolment	Number of students enrolled from other states	Number of students enrolled from other countries	Link of the relevant document
2018-19	02	00	

13. Total number of students admitted in the department:

Year	Program name	Program Code	Total Number of Seats Sanctioned	Total Number of students admitted
2018-19	Bachelor in Automobile Engineering	AE	60	60

14. Number of seats filled against seats reserved for various categories(including Divyangjan) in the department:

29 % of total sanctioned seats	Year	Number of seats earmarked for reserved category as per GOI or State Government rule			Number of students admitted from the reserved category				
		SC	ST	OBC	SC	ST	OBC	Gen	Others
17	2018-19	8	4	11	01	00	14	41	04

Name of the student enrolled under Differently abled Category	Gender	UDID Card Number	Type of Disability	Percentage of Disability	Program enrolled	Year of Enrolment
NA						

15. Special programmes conducted by the department for advanced learners and slow learners:

Provide the list along with the proofs for the activities undertaken by the department for advanced and slow learners.

At the First year level, students are identified into different academic categories based on their performance in the first internal assessment test. The weaker students thus identified are given more attention and it is ensured that they are taught to do well enough to perform at least to a level of passing in the university examinations.

Course-in-charge and class counselors during the teaching learning process identify the slow learners and advanced learners by observing their performance in different activities as well as the results of various assessment processes during the semester.

Mentor Mentee scheme, wherein a small group of students is allotted to one faculty mentor, helps to monitor the progress and difficulties faced by the students.

Periodic Parent Teacher meetings are organised where faculty members, and mentors interact with the parents of all learners and update them about the performance of their ward. It helps to enhance the performance of slow learners and groom advanced learners.

Remedial classes are organized for the students who are not good performers. Additional support is offered through examination oriented coaching and well formulated question banks as well as notes prepared by faculty.

When the divisions are formed, the batch of students with least scores are identified and scrupulous plan to ensure more practice among these students during the practical sessions is also made. Senior teachers are usually allotted to such batches to ensure good performance.

Study camp sessions are conducted to ensure that the weakest of the students are made to practise a certain minimum number of problems/topics from curriculum to ensure their success in examinations and thus improve their chances of placement in the higher semester.

Special counselling and extra classes are conducted for the students who have failed in any subject. Extra lab sessions, additional tutorial hours, links to e-books and subject related video lectures are some of the other initiatives for slow learners.

Extra time for slow learners with dyslexia is given during the university examinations.

Students having good academic records are encouraged to achieve higher ranks in university exams, and to take exams like GATE, GRE, TOEFL, IELTS, CAT etc. Teachers conduct extra sessions for students to prepare them for GATE examination.

Students having orientation towards research are motivated to present their work at conferences and competitions such as Avishkar, and this has helped us in winning awards at the university and also the state level.

These students are also encouraged to become part of the student council and form other student groups. Student activity fund has also been initiated to ensure that students have funds to travel to different parts of the country to participate in various competitions. Due to our efforts, multiple student teams have won 1st place in the AICTE hackathon in 2019 and well as in 2018.

In order to ensure that students do not get a drop year, extra remedial lectures for courses with maximum failures have been conducted.

16. Student- Full time teacher ratio:

Year	Number of students enrolled in the department(UG)	Number of students enrolled in the department (PG)	Number of full time teachers in the department (UG)	Number of full time teachers in the department (PG)	Number of teachers teaching both UG and PG courses	STR
2018-19	269	00	13	00	00	20.69

17. Number of teaching posts sanctioned, filled and vacant.

Designation	Sanctioned	Filled
Professor	01	01
Associate Professor	02	02
Assistant Professor	8	10
Total	11	13

18. Number of full time teachers with Ph.D. degree:

Year	Total No. Full time teachers	No. of teachers with PhD
2018-19	13	02

19. Details of full time teachers who received awards, recognition, fellowship at State, National, International level from government, recognized bodies:

Year	No. Of Full time Teachers	No. of teachers received awards/recognition/fellowship at State/National/International level	Relevant link
2018-19	13	01	https://drive.google.com/open?id=1oawNcB8gp2gNsR7n-cZfUvL7wranmfhs

20. Number of full time teachers from other States against sanctioned posts:

Year	No. Of Full time Teachers	No. of teachers from other states
2018-19	13	01

21. Details of examination related grievances received if any.

None

22. Adherence to the academic calendar:

Yes

23. Attainment of Programme outcomes, Programme specific outcomes and course outcomes:

APPENDED AT THE END

24. Result Analysis:

Program Code	Program Name	Level/Semester	Number of students appeared in the exam	Number of students passed in the exam
AEIII	Bachelor in Automobile Engineering	III	67	32
AEIV		IV	70	result awaited
AEV		V	63	27
AEVI		VI	60	result awaited
AEVII		VII	79	59
AEVIII		VIII	80	76

25. Total Grant received for research projects sponsored by the government and the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs

S N	Name of the Project/ Endowments, Chairs	Name of the Principal Investigator	Department of Principal Investigator	Year of Award	Funds provided	Duration of the project	Name of the Funding Agency	Type (Government/non-Government)	Relevant Document link
1	Development of glass ceramic composites and their mechanical properties evaluation	Dr. Divya Padmanabhan	AUTO	2018-19	50000	1 Year	University Minor Research Grant	Government	

26. Details of the teachers recognized as research guides:

S N	Name of teachers recognized as research guides	PG / PhD Recognition	Department	Year of Recognition
01	Dr. Divya Padmanabhan	PG and PhD	AUTO	2014 and 2018
02	Dr. Basvaraj Talikoti	PG	AUTO	2015
03	Prof. Amey Marathe	PG	AUTO	2017

27. Details of workshops/ seminars conducted on Intellectual Property Rights (IPR) and Industry- Academia Innovative practices:

S N	Year	Name of the workshop/ seminar	Date From – To	Activity(IPR/Industry -Academia Innovative practices)
	2018-19	Automotive Research & Development	17-19th Sept 2019	3 Day Proficiency Improvement Programme by ARAI,Pune

28. Details of incentives to teachers who receive state, national and international recognition/ awards:

Sr. No.	Name of the Awardee with contact details	Name of the Award	Name of the Awarding Agency
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01	Dr. Divya Padmanabhan	Reviewer and Session Chair - Conference on Technologies for Future Cities (CTFC-2018)	Pillai College of Engineering
02	Prof. Manoj Sharma	2nd rank in Avishkar Research Convention	Department of Students Development, University of Mumbai

29. Details of research papers published by teachers in the Journals notified on UGC website:

SN	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ISSN number	Link of the recognition in UGC enlistment of the Journal
01	Zirconia toughened alumina by slip casting and evaluation of its flexural behaviour.	Dr.Divya Padmanabhan	AUTO	Int. J. of Research & Analytical reviews	2018	IJRAR P-ISSN 2349-5138	https://www.ugc.ac.in/journalist/subjectwisejournalist.aspx?tid=MjM0ODEyNjk=&&did=U2VhcmNoIGJ5IEITU04=

30. Details of books and chapters in edited volumes/books published and papers in national/international conference:

Sl. No.	Name of Teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / international	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher	Relevant link
1	Dr.Basavaraj Talikoti	NA	Automatic gate system with autofocus camera using node-red	Notes in Mechanical Engineering	International Conference on Innovations in Mechanical Engineering by Springer, Hyderabad	International	2018-19	ISSN:2195-4356	Guru Nanak Institutions (GNI), Hyderabad	Springer	

2	Dr.Basavaraj Talikoti	NA	Optimization of a two-cylinder crankshaft by Computer Aided Engineering	Advances In Intelligent Systems & Computing	International Conference on Intelligent Communication, Control and Devices by Springer, Dehradun	International	2018-19	ISSN: 2194-5357	University of Petroleum & Energy Studies	Springer	
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31. Details of the extension activities undertaken by the department in sensitizing students to social issues and holistic development:

Details of extension programs conducted at the college level and well participated by students from the department

Sr. No	Program Details	Collaborating Agency	Number of Participated Students	Remarks
1	Marathon	Mahatma Education Society	431	
3	K12 at Nagarpalika School, Takka	ISHRAE	10	
4	Anubhav	PCE, New Panvel	900	
5	Handling emergencies and First aid Techniques	PCE, New Panvel	90	
6	K12 at Z P School , Vichumbe	ISHRAE	15	
7	K12 at Bhatia Vidyamandir	ISHRAE	12	
8	K12 Nagarpalika school , Podi	ISHRAE	10	
9	Blood Donation Camp	Social Club		
10	Uberang	Mahatma Education Society	32	
11	Community Service Day	Mahatma Education Society	156	
12	International Women's Day	Mahatma Education Society	120	

13	Building Resilience - A key to Women Empowerment	Mahatma Education Society	143	
14	Jumble Sale	Mahatma Education Society	600	
15	Anti Narcotics Campaign	Mahatma Education Society	150	
16	National Calamity Fund (Kerala)	Mahatma Education Society	175	
17	Maharashtra day	Mahatma Education Society	25	
18	Marathi Bhasha Diwas	Mahatma Education Society	51	
19	Shivaji Jayanti	Mahatma Education Society	550	
20	Republic Day	Mahatma Education Society	120	
21	Teacher's Day	Mahatma Education Society	550	
22	Panvel Gadhi river clean up drive	Mahatma Education Society	10	
23	Basic workshop on positive thinking	Mahatma Education Society	15	
24	Slum childrens' educational tour	Mahatma Education Society	10	
25	Blood Donation camp	Mahatma Education Society	140	
26	Yoga Workshop	Mahatma Education Society	30	

32. Total number of awards and recognition received for extension activities from Government/ recognized bodies:

SN	Name of the activity	Name of the Award/ recognition	Name of the Awarding government/ recognised bodies	Year of award	Name of the Faculty
01	Minor Research Grant	MU MRG (Rs. 50,000)	University of Mumbai	2019	Dr. Divya Padmanabhan

02	NPTEL online course on Automatic Control	Elite Grade	IIT Roorkee	2019	Prof. Amey Nijasure
03	Conference on Technologies for Future Cities (CTFC-2018)" 8th & 9th January, 2018	Session Chair	PCE Panvel	2018-19	Dr. Divya Padmanabhan
04	Conference on Technologies for Future Cities (CTFC-2018)" 8th & 9th January, 2018	Reviewer	PCE Panvel	2018-19	Dr. Divya Padmanabhan
05	Paper Presentation "A comparison of mechanical properties of zirconia ceramic calcined at different temperatures with zirconia glass ceramic composite"	Best paper award at Global meet on advances in design, materials & thermal engineering	Saraswati College of Engineering, Navi Mumbai.	2018-19	Prof. Pankaj K
06	Design Judge at Formula Bharat 2019	Design Judge	Formula Bharat	2018-19	Prof. Amey Marathe

33. Details of extension and out reached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc.:

SN	Name of the activity	Organising unit/ agency/ collaborating agency	Year of the activity	Number of teachers participated in such activities	Number of students participated in such activities
1	Marathon	Mahatma Education Society	2018-19	12	431
2	K12 at Nagarpalika School, Takka	ISHARE	2018-19	2	10
3	Anubhav	PCE, New Panvel	2018-19	25	900
4	Handling emergencies and First aid Techniques	PCE, New Panvel	2018-19	5	90
5	K12 at Z P School , Vichumbe	ISHARE	2018-19	2	15
6	K12 at Bhatia Vidyamandir	ISHARE	2018-19	2	12
7	K12 Nagarpalika school , Podi	ISHARE	2018-19	2	10
8	Blood Donation Camp	Social Club	2018-19	5	
9	Uberang	Mahatma Education Society	2018-19	129	32
10	Community Service Day	Mahatma Education Society	2018-19	39	156
11	International Women's Day	Mahatma Education Society	2018-19	50	120
12	Building Resilience - A key to Women Empowerment	Mahatma Education Society	2018-19	12	143
13	Jumble Sale	Mahatma Education Society	2018-19	10	600
14	Anti Narcotics Campaign	Mahatma Education Society	2018-19		150
15	Garage Sale	Mahatma Education Society	2018-19	10	250
16	National Calamity Fund (Kerala)	Mahatma Education Society	2018-19	159	175
17	Maharashtra day	Mahatma Education Society	2018-19	12	25
18	Marathi Bhasha Diwas	Mahatma Education Society	2018-19	12	51
19	Shivaji Jayanti	Mahatma Education Society	2018-19	50	550
20	Republic Day	Mahatma Education Society	2018-19	10	120
21	Teacher's Day	Mahatma Education Society	2018-19	159	550
22	Panvel Gadhi river clean up drive	Mahatma Education Society	2018-19	2	10

23	Basic workshop on positive thinking	Mahatma Education Society	2018-19	10	15
24	Yoga Workshop	Mahatma Education Society	2018-19	10	20
25	Slum childrens' educational tour	Mahatma Education Society	2018-19	2	10
26	Blood Donation camp	Mahatma Education Society	2018-19	5	140
27	Yoga Workshop	Mahatma Education Society	2018-19	4	30

34. Total number of Students participating in extension activities with Government Organization, Non-Government Organizations and Programmes such as Swachh Bharat, AIDs awareness, Gender issue etc.

SN	Name of the activity	Organising unit/ agency/ collaborating agency	Name of the scheme	Year of the activity	Number of students participated in such activities
1	Environmental Awareness Rally	PCE, New Panvel	FE Nature's Club	2018-19	600
2	Marathon to Kill ill of illiteracy	MES Pillai	Marathon 2019	2018-19	431
3	National Technology Day	PCE, New Panvel		11th May 2018	142
4	K12 at Nagarpalika School, Takka	ISHRAE		2018-19	10
6	Anubhav	PCE, New Panvel		2018-19	900
6	Handling emergencies and First aid Techniques	PCE, New Panvel		2018-19	90
7	K12 at Z P School, Vichumbe	ISHRAE		2018-19	15
8	K12 at Bhatia Vidyamandir	ISHRAE		2018-19	12
9	K12 Nagarpalika school, Podi	ISHARE		2018-19	10
10	Blood Donation	Social Club		2018-19	

	Camp				
11	Uberang	Mahatma Education Society		2018-19	32
12	Community Service Day	Mahatma Education Society		2018-19	156
13	International Women's Day	Mahatma Education Society		2018-19	120
14	Building Resilience - A key to Women Empowerment	Mahatma Education Society		2018-19	143
15	Hackathon (Odd sem)	Mahatma Education Society		2018-19	36
16	Hackathon	Mahatma Education Society		2018-19	18
17	Jumble Sale	Mahatma Education Society		2018-19	600
18	Anti Narcotics Campaign	Mahatma Education Society		2018-19	150
19	Garage Sale	Mahatma Education Society		2018-19	250
20	National Calamity Fund (Kerala)	Mahatma Education Society		2018-19	175
21	Maharashtra day	Mahatma Education Society		2018-19	25
22	Marathi Bhasha Diwas	Mahatma Education Society		2018-19	51
23	Shivaji Jayanti	Mahatma Education Society		2018-19	550
24	Republic Day	Mahatma Education Society		2018-19	120
25	Teacher's Day	Mahatma Education Society		2018-19	550
26	Panvel Gadhi river clean up drive	Mahatma Education Society		2018-19	10
27	Basic workshop on positive thinking	Mahatma Education Society		2018-19	15

28	Slum childrens' educational tour	Mahatma Education Society		2018-19	10
29	Blood Donation camp	Mahatma Education Society		2018-19	140
30	Anubhav	PCE, New Panvel	Students development	2018-19	900
31	Handling emergencies and First aid Techniques	PCE, New Panvel	Disaster management	2018-19	90

35. Details of linkages for faculty exchange, student exchange, internship, field trip, on-the- job training, research etc:

Sl. No.	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Year of commencement	Duration (From-To)	Nature of linkage
1	IV Report Royal Aircon, Blue Star, Airpro	Royal Aircon Pvt Ltd, VADA,	-	1 Day 05/01/19	Industrial visit
2	IV Report Royal Aircon, Blue Star, Airpro	Blue Star Ltd, Wada	-	1 Day 05/01/19	Industrial visit
3	IV Report Royal Aircon, Blue Star, Airpro	AirPro Engineers pvt Ltd	-	1 Day 05/01/19	Industrial visit
4	Internship to MRF Limited	MRF Limited, Vashi		Two week Jan 2019	Internship
5	Internship to Sai motor and service center	Sai motor and service center, varle, taluka wada,dist palghar	-	19th Dec 2018- 11th Jan 2019	Internship
6	Internship to Hyundai	Hyundai , Sakinaka	-	20th Dec 2018- 13th Jan 2019	Internship
7	Internship to MRF limited	MRF limited,Vashi	-	24th dec 2018 to 7th Jan 2019	Internship
8	Internship to Vishal Hyundai,	Vishal Hyundai, Panvel	-	13 June 2018 - 13 July 2018	Internship
9	Internship to Vishal Hyundai,	Vishal Hyundai, Panvel	-	13 June 2018 - 13 July 2018	Internship
10	Internship to Vishal Hyundai,	Vishal Hyundai, Panvel	-	13 June 2018 - 13 July 2018	Internship

11	Internship to Auto Hangar Pvt.Ltd	Auto Hangar Pvt.Ltd,Mumbai	-	13 June 2018 - 13 July 2018	Internship
12	Internship to Tata Motors Ltd.	Tata Motors Ltd.Delhi	-	19 June 2018 - 18 July 2018	Internship
13	Internship to Kanchan Auto W/S	Kanchan Auto W/S,Thane	-	1 July 2018 - 15 July 2018	Internship
14	Internship to Eak Automobiles Pvt Ltd	Eak Automobiles Pvt Ltd, Panvel	-	13th june 2018 to 13th july 2018	Internship
15	Internship to Shree Sai TVS Service center	Shree Sai TVS Service center, panvel	-	13th june 2018 to 14th july 2018	Internship
16	Internship to TATA MOTORS PVT LTD	TATA MOTORS PVT LTD, Gazipur, Delhi	-	19th june to 18th july 2018	Internship
17	Internship to Western Railways	Western Railways, Lower parale	-	18th june 2018 to 2nd july 2018	Internship
18	Internship to Sharayu 2 wheelers pvt ltd (Honda)	Sharayu 2 wheelers pvt ltd, Panvel	-	14th Dec 2018 to 12th jan 2019	Internship
19	Internship to Ram Motorcycles	Ram Motorcycles,Nerul	-	14th Dec 2018 to 14th jan 2019	Internship
20	Internship to Tech Mahindra	Tech Mahindra,Chandivli,Andheri(E)	-	28Jan 2019-20th July2019	Internship

36. Details of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. :

Sl. No.	Organisation with which MoU is signed	Name of the institution/ industry/ corporate house	Year of Signing MoU	Duration	List the actual activities under each MoU year wise	Number of students/teachers participated under MoUs
01	IFS Academy	Authorised CAD/CAE training centre	2018	03 months August - October, 2018	Conducted courses on CATIA and CREO	72 students and 3 faculties
02	IEOT	ONGC, Govt.of India	2018-19	01 year	1.Internships for students 2. expert lectures 3.Industrial visit to IEOT 4.Library usage of IEOT	2 to 3 students
03	Indian institute of Packaging	IIP,Ministry of Commerce,Govt.of India	2018-19	03 years Extendable upto 5 years	Summer internship to 4-5 students every year	4 to 5 students
04	Brainiac IP Solutions	Brainiac IP Solutions Pvt. Ltd.	2018-19	06 months	Drafting and Patent Filing,IPR	3 to 4 faculty, 4 to 5 students

05	Biocrux	BIOCRUX INDIA PVT. LTD.	2018-19	03 years Extendable upto 5 years	Recognition for Institute for conducting R&D ,Packaging and waste management like Automation,functionality ,IOT etc	16 to 20 students (workshop)
06	Indian Centre for plastics in the Environment	ICPE	2018-19	03 Years	ConductingR &D in the field of Plastic packaging and Information Exchange	Internship to 2-3 students of Third year

37. Details of departmental infrastructural & other facilities:

- a) Departmental Library (books, journals etc.): 183
- b) Computers and Internet facilities for staff : Yes, 30 PC
- c) Total number of class rooms : 03
- d) Class rooms with ICT facility : 03
- e) Students' laboratory : 10
- f) Research laboratories : 01
- g) Seminar Hall : 01
- h) Smart class room : 01
- i) Any other facility LCDs, : 01

38. Student – Computer ratio:

Total Number of students	Number of computers for students in working condition	Student Computer Ratio
269	24	11.2

39. Details of e-content developed by the faculty in the department:

Name of the e-content development facilities	Provide link to videos of the media centre and recording facility
Light board for visually dynamic video lectures	None
Screencast (Narrated video recording of the computer screen)	None
Pentip board recording	None

40. Details of maintenance of laboratory and classrooms:

Maintenance of the ten laboratories are done by the laboratory assistants in consultation with the laboratory incharge.

A logbook of maintenance activities are recorded and kept in every laboratory.

For the year 2018-19, a total of Rs.38194/- was spent on maintenance. .

Classrooms maintenance is done by the AVR support staff and housekeeping staff.

41. Number of students benefited from scholarships and freeships provided by the Government:

Name of the scheme	Number of students benefited by government scheme (Scholarships)	Number of students benefited by government scheme(freeships)	State Minority Scholarship	Merit Cum-Means Scholarship
VJNT	6			
OBC	30			
SBC	3			
SC	5			
EBC	35			

42. Total number of students benefited from scholarships, freeships, etc provided by the institution besides government schemes:

Name of the scheme with contact information	Number of students benefited by non-government schemes
Felicitation of toppers	7
Academic advance Scheme	60
TOTAL	67

43. Number of students enrolled capability enhancement and development scheme:

Name of the capability enhancement scheme	Year of implementation	Number of students enrolled	Name of the agencies involved with contact details
GATE training	2018-19	10	Faculty from Mech Auto Dept, PCE
Design of Cars	2018-19	34	Pearl Academy
Quantitative Aptitude	2018-19	60	Mr.Manoj Singh and Mr.Devendra
Career Counselling	2018-19	143	SMEC Labs (Expert Talk/Mech/Auto) SMEC Automation Pvt. Ltd. SMEC Automation Pvt. Ltd., #27, Sarvodaya Industrial Estate,Off Mahakali Caves Road, Andheri East, Mumbai Maharashtra 400 093 Tel : (+91)-22-65292358
Soft skill development	2018-19		Placement cell activity

Remedial coaching	2018-19	15	Prof. Divya Mv Padmanabhan - divyamvp@mes.ac.in
Language lab	2018-19	59	
Bridge courses	2018-19	48	CFD - Shilpa mondkar & tikaram varma - vtganpat@mes.ac.in

44. Number of students in the department benefitted by guidance for competitive examinations and career counseling offered by the institution:

Year	Name of the scheme	Number of students benefitted /attended/participated by career counseling/Competitive exam activities
2018-19	GATE Mentoring	-
2018-19	Campus Aptitude Test	180
2018-19	Career Readiness Program	180

45. Number of students attending Vocational Education and Training(VET)

Number of students attending VET	Total number of students
91+12=103	68+67=135

46. Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee:

No. of grievances appealed	No. of grievances redressed	Average time for grievance redressal in number of days
None	NA	NA

47. Number of outgoing students placed along with the name of the employer with contact details:

Number of students placed	Name of the employer with contact details	Package received	Program graduated from
01	Dyson Ltd	5.07L	Undergraduate program in Automobile Engineering
01	Eleation Academy, Kamla Arcade, In-Front of Bal Gandharv, JM Road,, Pune, Maharashtra 411005	2.4L	
01	HFFC, Shop No 114,Prajapati Arcade, Sector 15A,, PlotNo 22and 23,, New Panvel, Navi	3.55L	

	Mumbai, Maharashtra 410206		
01	PINCLICK, Indiranagar, Bengaluru,	3.72 L	

48. Details of the students going for higher education:

Number of students enrolling into higher education	Program graduated from	Department graduated from	Name of institution joined	Name of program admitted to
3	Bachelor Of Engineering	Automobile Engg	TU Clausthal	Master Of Science
			TU Clausthal	
			TU Clausthal	
1	Bachelor Of Engineering	Automobile Engg	Pittsburg State University	Master Of Science
1	Bachelor Of Engineering	Automobile Engg	Wayne state University	Master Of Science
1	Bachelor Of Engineering	Automobile Engg	National Institute of Design, Ahmedabad	Master of Design

49. Number of students appearing and qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations):

Registration /Roll No for the exam	Number of students selected/ qualifying							Civil Services	State government examination
	NET	SLET	GATE	GMAT	CAT	GRE	TOEFL/IELTS		
2016PE0702							Swapnil Sawant		

50. Number of awards/medals for outstanding performance in sports/cultural activities at national / international level:

Name of the award/ medal	National/ International	Sports/ Cultural	Name of the Student	Number of students	Adhaar Number/Admission Number
Secured 3rd position in College open level in Racing Competition	University level	Sports	Manthan Harvande	1	2016PE0751
Secured 4th position in University Inter collegiate level in Handball Competition	Mumbai University	Sports	Ameet Awari	3	2016PE0299
			Raman Bonde		2016PE0248
			Snehal Karbhari		2017PE0020

51. Details of the student council and the departmental student chapters:
AESM MESA council for 2018-19:

President- Kedar Redekar
Vice President- Amit Pradhan
Secretary- Tejas Nair
Joint secretary- Sujit Gate
Treasurer- Abhishek Dalvi
Joint treasurer- Prajwal Poojary
BE reps - Saumya Khedkar
BE reps - Aditya Nambiar
BE reps auto - Tejaswini Babu
TE reps - Shruti Sherkhane
TE reps auto- Sakshi Rai
SE reps- Shubham Khodpe
SE reps- Atharva Thombre
SE reps auto- Umarvysya Anujkumar Jayprakash

52. Number of sports and cultural activities/competitions organized at the institution level:

Year	Name of the Activity			
	SPORTS		CULTURAL	
2018-19	Sr. No	Alegria 2019(5-9th Feb)	Sr. No	Alegria 2019(5-9th Feb)
	1	FIFA 19 (PS4)	1	Free Style Solo
	2	NFS Most Wanted	2	Classical Solo
	3	CS GO	3	Solo Singing
	4	DOTA 2	4	Rapping
	5	PUBG	5	Beat Boxing
	6	Mini Militia	6	Stand Up Comedy
	7	Ludo King	7	Mono Acting
	8	Oculus VR Fruit Ninja	8	Open Mic
	9	Oculus VR Fruit Ninja spot	9	Instrumental Music
	10	Marathon (Pre-Alegria)	10	War Of DJs
	11	Futsal	11	Duet Dance
	12	Box Cricket	12	Folk Group
	13	Basketball	13	Free Style Group
	14	Volleyball	14	Skit
	15	Kabaddi	15	The Face Of Alegria
	16	Tug of War	16	Mr & Ms Alegria
	17	10m Air Rifle Shooting	17	Fitness Physique
	18	Badminton (Girls)	18	Fashion Show
	19	Badminton (Boys)	19	Treasure Hunt
	20	Shotput	20	Photography
	21	Chess	21	Fastest Finger First
	22	Table Tennis	22	PTV Rowdies
	23	Carrom (Single)	23	Food-a-thon
	24	Carrom (Double)	Other Events	
25	Football and cricket Quiz	24	Rose day	

	26	Devils Circuit	25	Farewell
	27	Neo Cricket	26	Garba night
	28	Neo shootout	27	Saree day
	29	Neo Basketball	28	Traditional day
	Other Events		29	Shivaji Jayanti
	30	Engineering Football League 2019(25 Feb to 7 Mar 2019)	30	Aarambh
	31	Mumbai University Volleyball Championship(10Dec to 13 Dec 2018)		
	32	FE Sports(25 SEP to 28 SEP 2018)		

53. Details of the contributions of alumni in the development of the department/ institution through financial and non financial means:

Sr. No	Date	Title	Speaker	Attendees	Duration
1	7 June 2019	GraphicDesign workshop	Mr.Kunal Kashyap	40	1 Day
2	23-24 Feb 2019 and 10th March 2019	" FLASK: Python web framework"	Dhiraj amin	35	3 Days
3	27th Feb 2019	Seminar on " Software engineering and project management " for TE IT students by Shivkumar	Shivkumar Vishwakarma	28	1 Day
4	8th March 2019	Women's Day Celebration	Apeksha Chavan	30	1 Day
5	15th and 16th March 2019	" Internet of Things "	Mimi Cherian		2 Days
6	22nd February, 2019	" Internet of Things "	Ruchira Patole	41	1 Day
7	2nd March 2019	Web Development	Akhil Menon		1 Day
8	4th Nov 2018	Flask Python Web Framework	Dhiraj Amin	33	1 Day

9	2nd October 2018	Basic Concepts of Python	Dhiraj Amin	100+	1 Day
10	2nd and 9th August 2018	LaTeX workshop	Ms. Ruchira Patole	42+34	2 Day
11	4th September 2018	Arduino	Ms. Aboli Khedkar	82	1 Day
12	29 September 2018	Web Development	Mr. Akhil Menon and Mr. Vishnu Nair.	29	1 Day

54. Details of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies:

Sr.No	Name of teacher	PAN	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support(REMARK)
<u>1</u>	Dr.Divya MV Padmanabhan	AIK PP8 716 A	---	ISRS	3500/-

55. Number of professional development/administrative/ training programs organized by the department for teaching and non teaching staff:

Sl. No	Title of the professional development program organised for teaching staff	Title of the administrative training program organised for non-teaching staff	Dates (from -to)	Dates (from-to) Non teaching	No of participants (Teaching staff)	No of participants (Nonteaching staff)
1	Three day practice oriented workshop on “Best Maintenance Practices on Pump”		19 to 21 Dec 2018		16	3
2		Handling emergencies and First aid Techniques	23rd March 2019			3

56. Details of teachers attending professional development Programmes viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes:

Number of teachers who attended	Title of the professional development program	Date and Duration (from – to)
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1	Conducted Orientation for DLOC in Sem VI-Automotive Materials on behalf of Mumbai University for UG program in Automobile Engg	14th January 2019
1	Short Course on Porous Materials Characterisation at IIT B	15th March 2019
2	Course orientation for Heat Transfer for University of Mumbai	12 July ,2018
2	2 week STTP on " Robotics and Industrial Automation"	12 to 16 Nov 2018
3	Course orientation on RAC	16 January 2019
1	1 week FTP on " Trends and Practices in Mechanical Engineering Manufacturing Industries" at L&T	27 Aug to 31 August 2018
1	Course orientation on Mechanical Vibration	16th January 2019
1	Course orientation for Automotive Systems CBCGS curriculum for University of Mumbai	12th July 2018

57. Total Grants received from non-government bodies, individuals, Philanthropers:

Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Initiative
IFS Academy	171000	Catia Course
IFS Academy	30000	Creo course

58. Details of quality enhancement initiatives in the academic and administrative domains of the department:

- Opportunity for higher studies(2 faculty have completed PhD while working in the college and 5 have completed their Masters Program).**
- Regular Industrial visits are organised for the benefit of the students.**
- Faculty and students are encouraged to do NPTEL courses.**
- Introduction of ARAI-PIP to benefit students**
- Most of the administration is paperless and most communications are made through e mails.**

59. Number of gender equity promotion Programmes organized by the department:

SN	Name of the activity	Organising unit/ agency/ collaborating agency	Name of the scheme	Year of the activity	Number of students participated in such activities
01	International Women's Day	Mahatma Education Society	-	2018	120
02	Girls in Tech	Mahatma Education Society	-	2018-19	10
03	Project Selection	Department	-	2018-19	3/80

SN. 01 and 02 were organised at the institute level

60. Details of the PBL topics floated by the department:

SE

SEM III - Rocket Launch Pad

SEM VI - Mechanical Toy

TE

SEM V - Conversion of Heat to Work

SEM VI - Automatic Device for Water Filling

61. Details of the final year project:

Total 21 Projects

In House - 20 Projects

Industry - 01 Projects

62. Initiatives taken by the department to enhance the quality of teaching learning process, research and entrepreneurship:

-Motivated the faculty to prepare Research Proposal and involve themselves in Projects, consultancy work.

-Encouraged to do certification courses online, eg. NPTEL and due credit for assignment given in termwork for students.

-Encouraged students to participate in Placement activities and TPO summit.

-Project Based Learning with a properly formulated problem statement to improve the learning experience in students.

-The winner on the ideation competition was Ketan Jain and team who is currently a student of TE Automobile Engg.

-Encourages students to take up internships since inception. The number of students who did internships is 2018-19 has been over 100.

-Guest lectures from Industry experts.

Declaration by the Head of the Department/Institution:

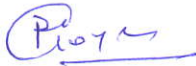
I am aware that the above information provided by the department will be validated by the AAA committee during the visit.

 (Dr. Dinya Padmanabhan)
Head of Department

(Automobile Engineering)

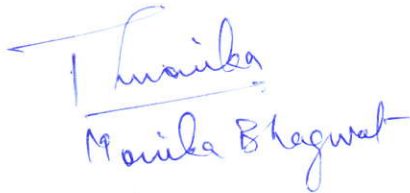


SM Jeehi



P.S. Goyal


Shamsi
Gorinca


Manika
Bhagwat


Pragat
Shah


Prady


Sachin S. Wani