ANNUAL QUALITY ASSURANCE REPORT (AQAR) (2016-17)

submitted to

National Assessment and Accreditation Council (NAAC)

An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072, India.

by

Amrutvahini Sheti & Shikshan Vikas Sanstha's

Amrutvahini College of Engineering
('A' Grade Accredited by NAAC with a CGPA 3.01)
(Three Times Accredited by NBA, New Delhi)
Sangamner – 422608, Dist.: Ahmednagar (M.S.), India.

The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

AQAR for the year	2016-17

1. Details of the Institution

1.1	Name of the Institution	**Amrutvahini College of Engineering, Sangamner**
1.2	Address Line 1	A/P - Ghulewadi, Tal–Sangamner, Dist- Ahmednagar
	Address Line 2	Amrutnagar, S.K.
	City/Town	Sangamner
	State	Maharashtra
	Pin Code	422 608
	Institution e-mail address	principal@avcoe.org
	Contact Nos.	024025-259016
	Name of the Head of the Institution:	Dr. M. A. Venkatesh
	Tel. No. with STD Code:	02425-259016
	Mobile:	9972132130
	Name of the IQAC Co-ordinator:	Prof. R. S. Tajane
	Mobile:	9850265484

	IQAC e-mail address:	iqac@avcoe.org

1.3 NAAC Track ID MHCOGN23786

OR

1.4 NAAC Executive Committee No. & Date EC (SC)/13/A&A/58.1 dated 17th March 2016

1.5 Website address: www.avcoe.org

Web-link of the AQAR: http://www.avcoe.org/pdf/AQAR2016-17.pdf

1.6 Accreditation Details

Sr. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	A	3.01	March 17, 2016	March 16, 2021
2	2nd Cycle				
3	3rd Cycle				
4	4th Cycle				

1.7 Date of Establishment of IQAC: DD/MM/YYYY 02/01/2015

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC

   i. AQAR 2015-16 submitted to NAAC on 29/09/2016

   ii. AQAR_____ _____ (DD/MM/YYYY)

   iii. AQAR_____ _____ (DD/MM/YYYY)

   iv. AQAR_____ _____ (DD/MM/YYYY)

1.9   Institutional Status

University   State | √ | Central | | Deemed | | Private | |

Affiliated College   Yes | √ | No | |

Constituent College   Yes | | No | √ |

Autonomous college of UGC   Yes | | No | √ |

Regulatory Agency approved   Yes | √ | No | |
Institution (AICTE)

Type of Institution   Co-education | √ | Men | | Women | |

                       Urban | | Rural | √ | Tribal | |

Financial Status   Grant-in-aid | | UGC 2(f) | √ | UGC 12B | |

Grant-in-aid + Self Financing | | Totally Self-financing | √ |

1.10   Type of Faculty/Programme

Arts | | Science | | Commerce | | Law | | PEI (Phys Edu.) | |

TEI (Edu) | | Engineering | √ | Health Science | | Management | √ |

Others (Specify) | |

1.11   Name of the Affiliating University   **Savitribai Phule Pune University, Pune**

1.12   Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc.

Autonomy by State/Central Govt. / University

University with Potential for Excellence   UGC-CPE

DST Star Scheme   UGC-CE

UGC-Special Assistance Programme   DST-FIST

UGC-Innovative PG programmes   Any other (*Specify*)   **AICTE Affiliated**

UGC-COP Programmes

2. IQAC Composition and Activities

2.1   No. of Teachers   1 (Principal) + 1 (Director) + 12

2.2   No. of Administrative/Technical staff   01

2.3   No. of students   01

2.4   No. of Management representatives   01

2.5   No. of Alumni   02

2.6   No. of any other stakeholder and community representatives   01

2.7   No. of Employers/ Industrialists   01

2.8   No. of other External Experts   01

2.9   Total No. of members | 22 |

2.10   No. of IQAC meetings held | 08 |

2.11   No. of meetings with various stakeholders: No. | 09 | Faculty | 02 |

Non-Teaching Staff | 02 | Students | 02 | Alumni | 01 | Others | 02 |

2.12   Has IQAC received any funding from UGC during the year?   Yes | | No | √ |

If yes, mention the amount | |

2.13   Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

(ii) Themes

1. Techniques of teaching
2. Patents procurement
3. Preparation of research funding proposal

2.14   Significant Activities and contributions made by IQAC

- For regular and appropriate conduct of academic and administrative audits core committee were formed comprising of Principal, Dean, IQAC Coordinator, ISO Coordinator and Head of Depts.

- Stake holder's feedback was taken for the academic year 2016-17

- Stake holder's feedback was taken and suggestion form it was adopted for betterment in curricular and curricular planning.

- IQAC had promoted Research Publications in National and International journals.

- Focused on qualification upgradation of faculties.

- Two Days Faculty Development Programme on "A Novel Approach to become the Best Teacher" during 12-13 December 2016

- Awareness programme on "Intellectual Property Rights (IPR)" on   14 Dec. 2016.

- International, National Workshop/ Conferences/ Seminars were organised.

- IQAC had initiated conduction of classes for softs skill, aptitude development, and academic development of students.

- Prepared AQAR.

2.15   Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
To carter the needs of slow learner and identification of Fast/ active learner.	Remedial classes were conducted to improve their academic performance and active learners were promoted for competitive study to grab adequate employment and also involved in study circle.
Academic Calendar preparation and implementation.	Executed through departmental conduction of activity as per respective department Academic Calendar.
To schedule Quality checks through IQAC and ISO Audits.	Execution and implementation was audited and recorded.
To plan for Social, Environmental Awareness and Activities. And branding activities as well.	Execution did through – Fire & Safety Audit, Green Audit, Dandakaranya Abhiyan, Swachha Sanaganmner Abhiyan, Unnat Maharshtra Abhiyan Rain Water Harvesting, Renewable Energy Utilisation.
To offer consultancy services and Market surveys if any	Consultancies did by institution and revenue generated around Rs. 443304.00
Construction of Seminar Hall Facility for MBA.	Constructed well equipped seminar hall.
To prepare for software based learning & devices	Students completed their projects based on this learning.
To encourage students to learn foreign language and Arrangement of GATE and Competitive exam coaching.	Six students get placed in Cognizant based on Japanese language skill. Two students get placed, based on German language skill.
Construction of New Computer lab for Electrical Dept., Software lab for IT Dept., CAM Lab for Production Dept.,	Constructed well equipped Computer lab for respective department.

The Academic Calendar of the year (2016-17) is attached as Annexure i.

2.15   Whether the AQAR was placed in statutory body   Yes   √   No

Management   √   Syndicate   Any other body

Provide the details of the action taken

> Curricular and co-curricular review and Evaluation of implementations did by administration.
> Updations and review of planning for Social, Environmental Awareness and Activities.
> Requirements and completions of Construction essentials.
> Availability of additional ICT and other learning resources for encouragement for skill, Knowledge and Behavioural development.
> Formation of formal committees for implementation of proposed activities. i.e IQAC, ISO, NBA, NAAC,
> Assistance and allocation of resources was provided for conduction of planed activity.
> Planned for Industrial tours and visits.

Part – B

Criterion – I

1. Curricular Aspects

1.1   Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
Ph.D.	01	Nil	01	Nil
P.G.	08	Nil	08	2
U.G.	08	Nil	08	27
P.G. Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate				-
Others				
Total	17	Nil	17	29

Inter-disciplinary	--	--	--	--
Innovative	--	--	--	--

1.2   (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	17
Trimester	--
Annual	--

1.3   Feedback from stakeholders*   Alumni √ Parents √ Employers √ Students √

(On all aspects)

Mode of feedback: Online √   Manual √   Co-operating schools (for PEI) ☐

*Provided an analysis of the feedback in the Annexure – ii

1.4   Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

- **In third year engineering credit system is introduced.**
- Updation in syllabus for various subject is given below-

Subject	Salient aspects
1. Civil	
Structural analysis II	Finding out slope and deflection of beam, frame, Trusses by various methods
	Introduction to finite element method
Infrastructural engineering and construction techniques	Scope of infrastructural engineering in national and global development
	Different construction techniques
	Tunneling
Structural Design I	Philosophy LSM for strength and serviceability
	Design of axially loaded column, eccentrically loaded column, laterally supported beam
Fluid Mechanics II	Fluid flow around submerged objects
	Depth- energy relationship in open channel flow
	Uniform flow in open channels
Advanced Surveying	Application of GPS in civil engineering
	Introduction to LIDAR and underground utility survey
Hydrology and Water Resource Engineering	Practical added for demonstration
Structural Design II	Introduction to various design philosophies of RC structures
	Design of slab, flexural member
Project Management and Engg. Economics	Role of project management consultants
	Organized structure in management
Foundation Engineering	Field test- SPT, n value correction and significance, DCPT, SCPT and introduction of advanced testing techniques
Environmental Engineering	Concept of municipal solid waste management
	Introduction to water supply scheme
	Water distribution system
	Rainwater harvesting

2. Production	
Metrology and Quality Control	Subject Name changed from 'Metrology and Mechanical Measurement' to 'Metrology and Quality Control'.
	Mechanical measurement Pressure measurement, Temperature measurement, Flow measurement and miscellaneous measurements topics removed from the syllabus (Unit IV –VI).
	Quality control and Assurance concepts introduced in the subject from (Unit IV –VI).
Industrial Engineering and Management	Subject Name changed from 'Industrial Engineering & Quality Assurance' to 'Industrial Engineering and Management'.
	Quality control and Assurance concepts removed from the subject from (Unit IV –VI).
	Industrial management, motivation and Entrepreneurship Development concept introduced (Unit I –III).
Material Forming	In the term work ' Study of roll pass design for one structural shape- round or square' changed to "Industrial visit and report based on visit'
Kinematics of Manufacturing Machines	Kinematics analysis of machine tool structure removed from the syllabus.
	Gear trains included as separate unit (Unit-III)
	Balancing of multi cylinder in-line engine, direct and reverse crank concept, Balancing of V and radial engines, balancing machines removed from the syllabus.
Cutting Tool Engineering	No major change in the content of the syllabus for Cutting Tool Engineering.
Production Management	No major change in the content of the syllabus for Production Management.
Numerical Techniques and Database	Numerical integration: The trapezoidal Rule, Simpson Rules, Romberg Integration included in Numerical methods-II.
	Introduction to Genetic Algorithm and Simulated Annealing added to Numerical Methods-IV
	Design and Analysis of Experiments added as a Unit-V.
Machine Tool Engineering	A simple program on CNC Turn/CNC Mill/CNC Drill machine added in the MTE Lab.
Tool Design	No major change in the content of the syllabus for Tool Design.
Process Planning and Tool Selection	a) Industrial Statistics and b) Design and analysis of Experiments replaced by c) Process selection and Capacity planning and d) Computer aided process planning.
3. Mechanical	
Manufacturing Process-I	Practical added with assigned term work
Thermodynamics	Psychometric unit added.
	Introduction to fuels, Theoretical amount of Oxygen / Air required for combustion. Stoichiometric Air: Fuel ratio, Excess air, lean and rich mixtures, Stoichiometric A: F ratio for petrol.

Strength of Materials	Addition of one lecture.
Audit course	Subject (non-credit course) added.
Fluid Mechanics	Addition of one lecture with practical exam.
Theory of Machines-I	Tutorial one hour with oral exam.
Engg. Metallurgy	Tutorial one hour with oral exam.
Applied Thermodynamics	Term work with oral exam.
Electrical and Electronics Engg.	Removal of one lecture.
4. Computer	
Digital Electronics & Logic Design	Apply the knowledge to appropriate IC as per the design specifications. Design simple digital systems using VHDL
Data Structures and Algorithm	To apply appropriate advanced data structure and efficient algorithms to approach the problems of various domain. To use effective and efficient data structures in solving various Computer Engineering domain problems.
Computer Organization and Architecture	To understand the higher processor architectures descended from 80386 architecture
Discrete Mathematics	To use appropriate set, function and relation models to understand practical examples, and interpret the associated operations and terminologies in context.
Object Oriented Programming	To explore the principles of Object Oriented Programming (OOP). To use the object-oriented paradigm in program design.
Engineering Mathematics III	To use Linear differential equations of higher order applicable to Control systems, Computer vision, and Robotics. Apply the Transform techniques such as Fourier transform, Z-transform and applications to Image processing.
Computer Graphics	To acquaint the learner with the basic concepts of Computer Graphics To learn and apply the various algorithms for generating and rendering graphical figures
Advanced Data Structures	To develop a logic for graphical modeling of the real life problems. To suggest appropriate data structure and algorithm for graphical solutions of the problems. To understand advanced data structures to solve complex problems in various domains.
Microprocessor	To understand the system level features and processes of advanced processor To acquaint the learner with application instruction set and logic to build assembly language programs.
Principles of Programming Languages	To learn principles of programming language To understand structural, computational and logical implications regarding programming languages

5. IT	
Theory of Computation	Classification and problem solving by machines
	Types of computational Models
	Fundamentals of problem decidability and reducibility
Database Management Systems	Learn aspect of database design, database languages, and database-system implementation.
	Basic issues of transaction processing and concurrency control.
Software Engineering & Project Management	Software complexity and software development understanding
	To know method of capturing, specifying, visualizing and analyzing software requirements
Operating System	Understanding of the role of Operating.
	Computer Systems Depth- with software and hardware
	Computer input and output management
Human-Computer Interaction	Principles of user-centered design (UCD) approach.
	Models for predicting human-computer-interactions
Computer Network Technology	Different addressing techniques used in network.
	Standards and protocols learned, for application development
Systems Programming	LEX for generation of Lexical Analyzer
	Code optimization in the compilation process
	Phases of Compiler
Design & Analysis of Algorithms	Divide conquer and complexity algorithm
	Design of parallel algorithms.
Cloud Computing	The need of Cloud based solutions.
	Effective techniques to program Cloud Systems
Data Science & Big Data Analytics	Basic mathematics behind the Big data
	Different Big data processing technologies.
	Visualize the Big Data using different tools.
6. ETC	
Microcontrollers	8051 Architecture included
	Timer register and its programming aspects added
	Different interfacing & their assembly programs added
Electronics System Design	Employability Skills in Electronics Design revised as Electronics System Design
Mechatronics	Newly introduced in semester-I instead of SPOS
Digital Communication	Removed Multiuser radio communication: Multi access techniques, satellite communication, radio link analysis, wireless communication., Removed TDMA & CDMA wireless communication systems
Electromagnetics	Transmission lines concepts for higher frequency is replaced by Uniform plane waves
Power Electronics	Separate unit introduced for Resonant Converters
ITCT	Added Data Communication & Physical Layer, Data Link Layer Removed Coding and Modulation

Advanced Processor	Introduced instead of Embedded Processors
	32/64 bit processor,80386 architecture removed
	Introduced Real World Interfacing with ARM7 Based Microcontroller
Business Management	Introduced instead Industrial Management
	Introduced Case study of a project Management
	Introduced Software quality management with respect to CMM level and ISO standard.
System Programming and Operating Systems	Introduced Concurrency control
	Inter process communication, Mutual Exclusion, Semaphores, Classical Problems of Synchronization: Readers-Writers, Producer Consumer, and Dining Philosopher problem
Employability Skills, Mini Project	Introduced instead of Mini project and Seminar
7. Electronics	
Power Electronics and Applications	Power Electronics Applications like UPS, Power Electronics for Electric drive applications
Electronics System Design Practice	Design using Internet of Things, PCB Design
Business Management and Organization	To provide a basis of understanding to the students with reference to working of business organization through the process of management, Understanding of business concepts with a view to prepare them to face emerging challenge of managing business.
Fundamentals of HDL	Introduction to HDL, Modelling styles in VHDL, Programmable Logic Devices, Procedures and Functions, Introduction to Verilog HDL , Design Elements in Verilog
PLC and Applications	PLC Overview, Basics of PLC Programming –I, Basics of PLC Programming –I, PLC Installation, Troubleshooting & Maintenance, Process control, HMI & SCADA, PLC Networking & Applications
8. Electrical	
Material Science	In unit 1,different material used for thin Film, Solar Cell, Batteries used for Electrical Vehicle and Electric Hybrid Vehicle are added
Electrical Measurement & Instrumentation	TOD Meter is removed from Unit3 and added inUnit4.
	In Unit 5 Digital Storage Oscilloscope is added.
Electrical Machines	In unit 1 Toroidal core transformer & all day efficiency is added.
	In unit 2 welding transformer is added.
Electrical Installation, maint. & testing	Content of unit 6 is completely new which include electrical
	Safety. In Unit 2 Substation & earthing part is added.
Adv. Microcontroller & its Applications	In unit 6 interfacing of electromechanical relays & opto - isolators are added

1.5   Any new Department/Centre introduced during the year. If yes, give details.

No

Criterion – II

2. Teaching, Learning and Evaluation

2.1   Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
173	152	13	05	--

2.2   No. of permanent faculty with Ph.D.

11

2.3   No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
04	--	--		02				06	

2.4   No. of Guest and Visiting faculty and Temporary faculty

19		00		41

2.5   Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	85	35	39
Presented Papers	32	28	17
Resource Persons	00	07	24

2.6   Innovative processes adopted by the institution in Teaching and Learning:

- Interactive teaching learning approach through quiz activity.
- Use of flash animations.
- Use of models, charts, analogy, puzzles, Role play, storytelling, brain storming.
- Use of open educational resources, E-learning - resources such as NPTEL, Khan Academy lectures, Webinars and Notes, etc.
- Practical MCQ using MYEXAMO & GATE-TUTORS software
- Intranet institute repository of teacher's notes, question bank, model solution, and research papers.
- Self-learning assignments are given to the students based on e-resources.
- Value added courses, Workshops
- Presentation of seminar on advanced topics through student involvement.
- Industry and site visits
- Conduct of mini projects in the concerned subjects
- Real-time projects can be assigned to the advance learners.
- Guest lectures and expert talks.
- Study circle
- Beyond syllabus topics
- Market survey

2.7   Total No. of actual teaching days during this academic year   **180**

2.8   Examination/ Evaluation Reforms initiated by the institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Institute adheres to the examination rules and regulations framed by Savitribai Phule Pune University, Pune for examination/ evaluation process and it includes:

- Credit-Grade based performance and assessment system.
- Open Book Examination for PG.
- Barcoding.
- Photocopy of answer sheets.
- Moderation of answer sheets.
- Online Multiple choice questions.

In addition to this monthly class test at institute and per-university exam are conducted & evaluated. The results of the same are informed to the parent by SMS. Also My Examo software is used for hands on practice of Online Multiple Choice Questions. Also weekly test for first year and second year students in addition to monthly test.

2.9   No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum development workshop

4	5	29

2.10   Average percentage of attendance of students

79.23

2.11   Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
Civil Engineering	141	41.84	28.37	3.55	0	0
Computer Engineering	146	25.34	52.05	16.44	0	0
Mechanical Engineering	230	36.52	36.52	7.39	0	0
Production Engineering	91	31.87	48.35	14.29	0	0
Electronics Engineering	89	65.17	25.84	1.12	0	0
Electronics & Telecommunication Engineering	82	62.20	26.83	0.00	0	0
Information Technology	75	66.67	28.00	1.33	0	0
Electrical Engineering	68	83.82	8.82	0.00	0	0
MBA	36	00	67	22	2	9

2.12   How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- IQAC checks course files, lab manuals, lab index card, theory and practical attendance sheets, Record-Conduction-Viva (RCV) status, staff feedback in every semester in association with ISO and report same to the Principal.

- Review of action plan taken through IQAC members meeting chaired by IQAC Director.

- Supervision of academic conductions and sessions by vigilance/monitoring committee and HOD. Counseling of staff members for improvement if needed.

- Monthly tutor meetings are initiated to discuss issues related to curricular and extracurricular activities/events.

2.13   Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	*Number of faculty benefitted*
Refresher courses	54
UGC – Faculty Improvement Programme	20
HRD Programmes	27
Orientation Programmes	107
Faculty exchange Programme	0
Staff training conducted by the university	25
Staff training conducted by other institutions	23
Summer / Winter schools, Workshops, etc.	55
Others	51

2.14   Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	44	--	--	--
Technical Staff	67	--	--	--

Criterion – III

3. Research, Consultancy and Extension

3.1   Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- The institute has conducted awareness Programme on **"Intellectual Property Rights (IPR)"** in association with IQAC, to create awareness about the Intellectual Property Rights in the field of Engineering and Technology.

- The institute has organised two days Faculty Development Programme on **"A Novel Approach to become the Best Teacher"** in association with IQAC, to understand and implement the best teaching learning practices for the sustainable development of Student, Teacher, Institute and the Nation

- The institute organizes annual national level mega technical event for the students. The event includes technical paper presentation, project exhibition, coding competition, quizzes, technical games, aptitude test and robotics competition to develop scientific temper and research culture in students.

- The institute sponsors the students for attending project and paper presentation, science exhibition, seminars, workshops, and other technical events.

- Students are also motivated to participate in inter college / university level competitions like project competition (Avishkar, DIPEX) and PGCON (conference for PG students).

- The institute gives recognition for student innovations.

- The institute encourages students to attend research webinars.

- The institute has organized visits to research institutes such as Giant Meter Wave Radio Telescope (GMRT), Khodad, Pune; Maharashtra Engineering Research Institute (MERI), Nashik; Water and Land Management Institute (WALMI), Aurangabad; Indo German Tool Room (IGTR), Aurangabad; Vehicle Research and Development Establishment (VRDE), Ahmednagar.

- The institute has digital library for students which has on line research journals along with e-books.

- Students are involved in the faculty research projects related to BCUD and Aakash Project of IIT, Mumbai.

- AAKASH tablets are provided to students and competitions are organized for development of Android Apps.

-

- Institute has Students' chapters of IEI, IEEE, IETE, CSI and ISTE through which various technical programs such as expert lectures of renowned scientists, workshops and technical fest are organized.

- The institute offering consultancy in manufacturing of CNC products. Also providing CMM (Coordinate Measuring Machine) testing services to industries.

- Training programme on CNC, CMM and Robot.

3.2   Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	--	--	--	--
Outlay in Rs. Lakhs	--	--	--	--

3.3   Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	6	9	--	--
Outlay in Rs. Lakhs	7.570	13.490	--	--

3.4   Details on research publications

	International	National	Others
Peer Review Journals	41	11	0
Non-Peer Review Journals	5	6	0
e-Journals	30	0	0
Conference Proceedings	55	28	1

3.5   Details on Impact factor of publications:

Range

0.25 to 6.025

Average

3.87

Maximum h-index

15

Nos. in SCOPUS

16

3.6   Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Name of the funding Agency	Total grant sanctioned	Received
Major projects	--	--	--
Minor Projects	BCUD, Pune	1584000	854500
Interdisciplinary Projects	--	--	--
Industry sponsored	Rahul Enterprises, Nashik	Only Technology Transfer	Grant not received
	Elite Technologies, Nashik		
	N-Sys Technologies, Pune		
	Microworld, Nashik		
	Spectra Innovation		
	All Cargo global logistics	--	--
	R.M. Engineering Works	--	--
Projects sponsored by the University/ College	SPPU,AVCOE	7,50,000	3,65,000
Students research projects *(other than compulsory by the University)*	--	--	--
Any other(Specify)	NVIDIA,ISTE	1,50,000	1,50,000
Total:		**24,84,000**	**13,69,500**

3.7   No. of books published   i) With ISBN No.   06   Chapters in Edited Books   02

ii) Without ISBN No.   --

3.8   No. of University Departments receiving funds from

UGC-SAP   --   CAS   --   DST-FIST   --

DPE   --   DBT Scheme/funds   --

3.9   For colleges   Autonomy   --   CPE   --   DBT Star Scheme   --

INSPIRE   --   CE   --   Any Other(specify)   --

3.10   Revenue generated through consultancy

<div style="text-align:right">

Rs. 443304.00/-

</div>

3.11   No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	01	03	02	01	02
Sponsoring agencies	SPPU	ISTE, Self BCUD	Self	SPPU	SELF

3.12   No. of faculty served as experts, chairpersons or resource persons | 31 |

3.13   No. of collaborations   International | 03 | National | 02 | Any other | 01 |

3.14   No. of linkages created during this year | 6 |

3.15   Total budget for research for current year in lakhs:

From Funding agency | 18.34 | From Management of University/College | 6.5831 |

Total: | 24.92 |

3.16   No. of patents received this year

Type of Patent		Number
National	Applied	02
	Granted	02
International	Applied	--
	Granted	--
Commercialised	Applied	--
	Granted	--

3.17   No. of research awards/ recognitions received by faculty and research fellows of the institute in the year

Total	International	National	State	University	Dist.	College
04	01	--	--	02	01	--

3.18   No. of faculty from the Institution

who are Ph.D. Guides and students registered under them | 00 | | 00 |

* Research guide and students attached to research centre | 09* | | 26* |

3.19   No. of Ph.D. awarded by faculty from the Institution | -- |

3.20   No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF | -- | SRF | -- | Project Fellows | -- | Any other | 01 |

3.21   No. of students Participated in NSS events:

University level | 100 | State level | -- |

National level | -- | International level | -- |

3.22   No. of students participated in NCC events:

University level | -- | State level | -- |

National level | -- | International level | -- |

3.23   No. of Awards won in NSS:

University level | 01 | State level | -- |

National level | -- | International level | -- |

3.24   No. of Awards won in NCC:

University level | -- | State level | -- |

National level | -- | International level | -- |

3.25   No. of Extension activities organized

University forum | -- | College forum | 01 |

NCC | NA | NSS | 17 | Any other | 01 |

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

1. Swachha Bharat abhiyan

2. Blood donation camp and round a clock blood help line.

3. Tree plantation under Dandkaranya abhiyan

4. Microsoft student partnership program

5. Water conservation program

6. Conducted technical training session for faculty & students (T.E and B.E.) under center of excellence established with Texas Instrument, India

7. Donate sport kit @ velhale deaf and dump school

8. Cleaning India – Green India (Sangamner town)

9. Counselling citizen about dissociation of wet garbage and dry garbage separation.

10. Rain water harvesting and kitchen garden motivation.

11. Cleanliness campaign

12. Spread awareness, counselling and encouragement regarding harm in using plastic carry bags, usefulness of water conservation, wet garbage etc. in Sangamner city.

13. Lecture Series on "Carrier Opportunities after 12th" to junior college students by faculty.

14. Digital transaction through Bhim App.

15. Computer literacy programme for villagers.

16. Soil health card for nearby villagers.

Criterion – IV
4. Infrastructure and Learning Resources

4.1   Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	92080 sq. mts. (23.02 Acres)	Nil	Institute	92080 sq. mts (23.02 Acres)
Class rooms	48	-4	Institute	44
Laboratories	96	2	Institute	98
Seminar Halls	09	0	Institute	9
No. of important equipment's purchased (≥ 1-0 lakh) during the current year.	152	23	MODROB (AICTE) / BCUD (SPPU, Pune) & Institute	175
Value of the equipment prchased during the year (Rs. in Lakhs)	6,78,72,040/-	15,22,432/-	MODROB (AICTE) / BCUD (SPPU, ne) & Institute	6,93,94,472/-
Others (Tutorial Rooms)	15	0	Institute	15

4.2   Computerization of administration and library

Computerization of administration:

Ananosoft (EMS) system is used for administration activities as following tabs

- Admission
- Registration
- Fee Receipt & Payments
- Attendance (Student)
- Attendance (Staff)
- Library Management System
- Scholarship Management
- Students Results

- Certificate Generation

- Hostel Management

- Store Management

- Internal Approval System (DP Management)

- Event Management

- Principal Desk

- Training & Placement

- Alumni

- Notice Viewer

- Student Comments

Computerization of Library:

- Online library portal (FTP Server) is made available through intranet within the Campus for access library electronic resources such as NPTEL videos, e-books and notes of faculty.

- Library provided OPAC (Online Public Access Catalogue) facility.

- All the department library are connected by LAN and also equipped with NPTEL and technical videos, notes, etc. placed on desktop computers.

- CCTV cameras are installed in the department and library at various places for security purpose.

4.3   Library services:

	Existing		Newly added		Total	
	No.	**Value**	**No.**	**Value**	**No.**	**Value**
Text Books	59678	2,00,66,162/-	2590	21,29,453/-	62268	2,21,95,615/-
Reference Books						
e-Books	261	--	0	0	261	0
Journals	122	3,11,543/-	01	2,500	123	3,36,195
e-Journals	4867	16,70,134/-	00	00	4867	17,55,106/-
Digital Database	06		00	00	06	
CD & Video*	447	--	1043	00	1490	--
Others (specify)	--	--	--	--	--	--

*Complimentary with books

4.4   Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Brows-ing Centres	Computer Centres	Office	Depart-ments	Others
Existing	1227	35	100mbps (404 PCs Excluding IT, Civil & MBA)	10	12	Ananosoft (ERP System)	Anano soft	--
Added	41	--	--	--	--	A/C-02	ETC-05,Electr-30	W/s-01,hostel-02,T&P-01
Total	1268	35	--	10	12	02	35	04

4.5   Computer, Internet access, training to teachers and students and any other programme for technology up-gradation (Networking, e-Governance etc.)

> A. Software value added courses for students: (Dept. of Electrical Engineering) AutoCAD for SE (70 Nos.)
>
> B. For Technology up-gradation following value added courses are conducted(Dept. of Computer Engineering)
>
> - Course on "Importance of Redhat Linux certification"
> - Course on "Graphics for All: Accelerate Xendesktop and XenApp with NVIDIA Grid"
> - "Software Testing "
> - "NVIDIA Webinar on "Deliver High Performance 3D Desktops with VMware Horizon and NVIDIA GRID"
> - "A Study on Digital Forensic in Hadoop"
> - "New Challenges for Data, Systems and Applications"
> - "CUDA: A Parallel Programming Technique"
> - "Bigdata" & Hadoop"
> - "3D animation and gaming"
>
> C. Dept. of Electronics Engineering
>
> - Training Program on New Technologies for e.g.
> - "Industrial Approach in Electronics" by Mr. Sanjay Chaudhari, Director Electronics Study Center, Nashik

- Embedded system & Internet of Things by OS3 InfoTech, Thane

- Variable Frequency Drives (VFDs) by Fox Solutions, Nashik

- The department has organised expert talk on "Discrete Time Signal Processing" by Dr.Maheshkumar Kolekar, IIT, Patna

- To enhance the awareness of advanced technology the Department has conducted workshop sponsored by SPPU Pune for students on "Internet of Things for smart Cities" with Hands-on sessions on IoT based Application

- To enhance awareness of faculty with the industry level Analog & Digital IC Design flow faculty development program was arranged on "Analog & Digital IC design flow using Mentor Graphics EDA tools" in association with the experts from COREAL Technologies under centre of excellence established with Texas Instrument, India

- Analog Circuit Design contest was conducted for the students under Centre of Excellence established with Texas Instrument, India

D. Dept. of Production Engineering

- Dedicated Computers with internet facility for individual staff members.

E. Software value added courses for students & Staff (Dept. of Mechanical Engineering)

- Two days short term course on 'Rapid Prototyping and Feature CAM.

- One day FDP on 'Automation Studio' by Indiasoft.

- A training programme on 'Master CAM'

F. Computer and internet access orientation and awareness (M.B.A.)

- MS. Office 2007/10

- MIS orientation for second year

- Lab in computer application and operation

G. Induction to first year engineering student (Engineering science)

- Computer awareness programme

- Conduction of lecture for curricular and extracurricular motivation

H. Dept. of E&TC Engineering

- Workshop on "C Language" for SE E&TC 71 students by Prof. C.D. Bhos

- Workshop on "PCB Manufacturing" for SE E&TC 71 students by Prof. H.A. Shinde.

- Workshop on "Industrial approach in Electronics" by Mr. Sanjay Chaudhari for SE E&TC and TE E&TC (89 students).

4.6   Amount spent on maintenance in lakhs:

i) ICT

| 15.86878 |

ii) Campus Infrastructure and facilities

| 35.45044 |

iii) Equipment's

| 8.80548 |

iv) Others

| 26.01190 |

Total:

| 86.1366 |

Criterion – V
5. Student Support and Progression

5.1   Contribution of IQAC in enhancing awareness about Student Support Services

> The Student support Services and progression are primarily looked after by the Dean of our institution. Introduction of student centric welfare schemes, addressing various requirements of residential students and providing necessary support system for student related issues are managed by the Dean in consultation with Deans of the Faculties, wardens of the Hostels and Student representatives. The IQAC has a very limited role to play in these activities. The institute is publishes its updated prospectus/handbook annually and this prospectus are distribute among students with application form who applies for different discipline.
>
> The accountability of these all is done annually by providing information to the students as below
>
> A. The academic schedule of the academic year with test date, Parent teacher meeting, and other activities.
>
> B. The students could also find the various co-curricular and extracurricular activities.
>
> C. Summarize each department with Intake, Staff Strength, Laboratories, software, equipment's, and Result with toppers list.
>
> D. Detail information of department of Master of Business Administration with campus photo given in Boucher.
>
> E. Highlights about Gymkhana, sports, Shopping complex, Mess and canteen, Transportation etc.
>
> F. Provide Information of college Library with facility of reading hall, and etc. in this given information about the various scholarship provided by the institute.
>
> G. Mention the various committee information available in the institute like Ant ragging, Women's Grievance cell, Discipline Committee.
>
> H. The institute is providing academic calendar.
>
> I. Providing Information of various events organised and conducted by the institution like Seminar, Workshop, Value addition course, Training Programme, Expert lecture, Conference etc.
>
> J. Sport activity played by students indoor and outdoor games and achievement by students at various level like District, State, zonal and Regional level etc.
>
> K. Each department has its own association under this conducting various activities for students are like Group discussion, Debate etc.
>
> L. Prospects contain the information about the Admission of students.
>
> M. Regular Checking of Course file in every start of academic year for smooth conduction of lecture for students.
>
> N. Conduction of regular meeting with IQAC and Student member for better improvement of student support.

5.2   Efforts made by the institution for tracking the progression

> 1. Effective Interaction between class teachers &students.
>
> 2. Conducting Regular test , alumni meet, feedback from Stake holders , Group discussion , Surprise test, Learning Process and social networking
>
> 3. Result evaluation, Placements. Research papers writing by students.
>
> 4. Motivates to participate in Project Competition, Trainings, different events etc.
>
> 5. Motivates the students by giving Amrut Meritious Scholarship to those students who have secured more than 80% in University exams.

5.3   (a) Total Number of students: **3518**

UG	PG	Ph. D.	Others
3278	214	09	00

(b) No. of students outside the state

32

(c) No. of international students

00

Men

No	%
2149	61.54

Women

No	%
1343	38.45

Last Year						This Year					
General	**SC**	**ST**	**OBC**	**Physically Challenged**	**Total**	**General**	**SC**	**ST**	**OBC**	**Physically Challenged**	**Total**
893	255	88	2542	02	3780	963	273	81	2199	02	3518

Demand ratio: **NA***   Dropout %: **1.85%**

* All seats are allocated through centralised admission by Director of Technical Education-

5.4   Details of student support mechanism for coaching for competitive examinations

<table>
<tr><td colspan="4" align="center">Summary of Competitive Exam Training</td></tr>
<tr><td align="center">Year</td><td align="center">Expert Lectures</td><td align="center">Workshops/ Training</td><td align="center">Total</td></tr>
<tr><td align="center">2015-16</td><td align="center">03</td><td align="center">01</td><td align="center">04</td></tr>
</table>

<table>
<tr><td colspan="6" align="center">Competitive Exam Cell
Coaching For Competitive exams
1st July-2015 to 30th June 2016</td></tr>
<tr>
<td>Sr. No</td>
<td>Year with Date</td>
<td>Event/Expert lecture/ Workshop/ Test</td>
<td>Resource Person/Organization</td>
<td>Target Audience</td>
<td>Remark</td>
</tr>
<tr>
<td>01</td>
<td>22/06/2016</td>
<td>"GATE 2017"</td>
<td>Gate Forum Institute, Hydrabad</td>
<td>BE (All branches)</td>
<td>Importance of GATE exam</td>
</tr>
<tr>
<td>02</td>
<td>01/07/2016</td>
<td>Awareness of GATE</td>
<td>GATEXPERT Edu. Services Pvt. Ltd., Hydrabad</td>
<td>TE, BE (All branches)</td>
<td>To prepare all branch students to crack GATE.</td>
</tr>
<tr>
<td>03</td>
<td>12/07/2016</td>
<td>Competitive Exam.</td>
<td>Mr. Paresh Gugale</td>
<td>BE (All branches)</td>
<td>New aspects of GATE 2016 and its importance</td>
</tr>
<tr>
<td>04</td>
<td>20/08/2016 to 30/01/2017</td>
<td>Gate Workshop</td>
<td>Imperial Institute of Excellence, Pune</td>
<td>BE (All branches)</td>
<td>To prepare all branch students to crack GATE.</td>
</tr>
</table>

No. of students beneficiaries   **750**

5.5   No. of students qualified in these examinations

NET	SET/SLET	GATE	CAT
--	--	24	00

IAS/IPS etc.	STATE PSC	UPSC	Others
--	--	--	13

5.6   Details of student counselling and career guidance

Mentoring Scheme is practiced a Tutor/Mentor (faculty) is allotted to students from first to final year. Meetings are conducted by the mentor with the students to discuss academic performance and progress. Mentors render guidance in studies, career planning and also address personal and psycho social issues.

A. Academic

The institute provides regular counselling to the students to address issues relating to their academic shortfall and obstacles. The institute has a tutor scheme where a group of students are placed under the guidance of tutor. The Tutor looks after their academic requirements and makes arrangements for remedial and tutorial classes.

B. Personal

The Tutors fulfil his responsibilities in regards to the students allotted in mentorship individually. The students are provided the parental and friendly environment for sharing of their personal problem even, to make them comfortable. The tutors maintain secrecy of any personal information and takes necessary corrective steps in consultation with senior official staffs, thereby addressing personal problems.

C. Career

The students are guided by the faculty in choosing appropriate branch. They are informed about the scope and nature of the various subjects form syllabus. They are counselled adequately to shape their career. Personalized counselling and parental care is made available by mentor schemes practiced in the institute. The institute also encourages the students towards taking Higher Education and Research by arranging in house special training for Competitive Exams, Soft Skills, and Aptitude Tests etc.

D. Psycho-Social

The candidates at times come face to face with certain social issues or problems which tend to bring the inferiority complex in them. The teachers make it sure that no such deterioration happens with the psycho social understanding of the students. They are counselled to become better human beings and advised to stand tall for the social cause.

Sr. No	Event	Resource Person/ Organization	Class & Branch	Conduction Date
1	Induction Program Training and Placements	Prof. V.B.Shinde	BE (All Branches)	June & July 2016
2	Workshop on opportunities in EIS in TCS	Mr.Sivanand Jadhav, TCS, Pune	BE students, Faculty	28/06/2016
3	Seminar on Career Guidance for GATE, IAS etc..	Mr. Gati ACE Academy, Pune	BE students	29/06/2016
4	TCS codevita contest	TCS, Pune	BE students	30/06/2016
5	Expert Lecture on Japanese Language	Sujata Kolekar Associate Director, Congnizant Tech, Pune	BE Students	13/08/2016
6	Resume Writing	GATI Jalgaon	BE Students	29/08/2016
7	Brainstorming Session	Potato Labs	SE & TE Students	30/08/2016
8	TCS Company Specific cracker	FACE Academy Hyderabad	Eligible BE Students (277)	31/08/2016 to 03/09/2016
9	Basic Linux	OS3 Infotech pvt ltd	BE (Comp/IT) 53-Students	16/01/2017 to 21/01/2017
10	Embedded & IOT	OS3 Infotech pvt ltd	BE (Elex/ETC) 32-Students	15/02/2017 to 20/02/2017
11	Embedded & IOT	OS3 Infotech pvt ltd	BE (Elex/ETC) 29-Students	22/02/2017 to 27/02/2017
12	Basic Aptitude	GNOSIS Plus Eduventures, Jalgaon	All TE Students	13/02/2017 to 18/02/2017
13	English Speaking Course	Step Up Career Academys	46 resistered students	12/03/2017 19/03/2017 26/03/2017 02/04/2017

No. of students benefitted **2627**

5.7   Details of campus placement

On campus			Off Campus
Number of Organizations Visited	**Number of Students Participated**	**Number of Students Placed**	**Number of Students Placed**
63	450	312	10

5.8   Details of gender sensitization programmes

Gender sensitization

It refers to the modification of behavior by raising awareness of gender equality concerns. This can be achieved by conducting various sensitization campaigns, workshop, programs etc.

Sensitization in the domain of <u>Humanities</u> and <u>Social Sciences</u>, is seen an awareness informed propensity or disposition which aims at changing behavior so that it is sensitive to certain issues.

Gender sensitization may be seen as "the awareness informed disposition or propensity to behave in a manner which is sensitive to gender justice and equality issues.

It is interlinked with <u>gender empowerment</u>.

Gender sensitization theories claim that modification of the behavior of <u>teachers</u> and parents (etc.) towards children can have a causal effect on <u>gender equality</u>.

Gender sensitizing "is about changing behavior and instilling empathy into the views that we hold about our own and the other gender.

It helps people in "examining their personal attitudes and beliefs and questioning the 'realities' they thought they know."

Point Discussed under this issue:

1. Safety of Girls health issues. Personality Development.

2. Personality Development.

3. Awareness of Maintaining Hemoglobin.

To overcome all this problems & understanding of gender equality, empowerment our college has arranged the various Guest Lectures to motivate students on Gender Sensitization.

1. **Self-Motivation & Stress Management.**

   The Program Titled "Engineering- Career Formation" of student was organized on **15th March 2017**, For the session renowned the Resorce Person invited was **Mrs. Dipali Chandak**. She is expert in academic field & working for society. Total 350 students & staff members were present for programme. All the session was interactive & full of Knowledgable which helps our students to develop their personality in all means.

2. **Prevention of Thyroid & Hormonal Imbalance.**

   The Program Titled "Woman Health" of girls student **was organized on 17th Feb 2017**, For the session the **Person invited was Dr. Archana Mali.** Total 150 students & Ladies staff members were present for programme. All the session was interactive & full of Knowledgable which helps our students to develope thier health issues.

3. Karate Training for girls student was organized by institute on **3rd Feb. 2017**. The trainer for the same was **Mr. Rupesh Rupawate**, who is renowed champion and Master in Karate.

5.9   Students Activities

5.9.1 (i) No. of students participated in Sports, Games and other events

State/ University level | 06 | National level | 01 | International level | -- |

(ii) No. of students participated in cultural events

State/ University level | 20 | National level | -- | International level | -- |

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level | -- | National level | -- | International level | -- |

Cultural: State/ University level | -- | National level | -- | International level | -- |

5.10   Scholarships and Financial Support

	Number of Students	Amount
Financial support from institution	569	2,18,16,728/-
Financial support from government	2579	13,84,65,715/-
Financial support from other sources	11	2,75,000/-
Number of students who received International/ National recognitions	02	1,60,000/-

5.11   Student organised / initiatives

Fairs: State/ University level | -- | National level | 04 | International level | -- |

Exhibition: State/ University level | 01 | National level | -- | International level | -- |

5.12   No. of social initiatives undertaken by the students | 09 |

5.13   Major grievances of students (if any) redressed:

| Nil |

Criterion – VI

6. Governance, Leadership and Management

6.1   State the Vision and Mission of the institution

Vision:-

To create opportunities for rural students to become able engineers and technocrats through continual excellence in engineering education.

Mission:-

Our mission is to create self-disciplined, physically fit, mentally robust and morally strong engineers and technocrats with high degree of integrity and sense of purpose who are capable to meet challenges of ever advancing technology for the benefit of mankind and nature.

We, the management, the faculty and staff, therefore promise to strive hard and commit ourselves to achieve this objective through a continuous process of learning and appreciation of needs of time.

6.2   Does the Institution has a management Information System

---

1. Ananosoft (ERP) system is used for administration, finance, hostel and academic work.

2. All India survey on higher education (AISHE)

In this we are storing college related and infrastructure related information, hostel capacity, department wise strength, results, staff information (teaching / non-teaching), budget, scholarships, loans and accreditation etc. information.

6.3   Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

---

1. Sending suggestions to Savitribai Phule Pune University (SPPU) from all the stakeholders.

2. Actively participating in syllabus design workshops.

3. Suggestions at the time of syllabus orientation/implementation program.

6.3.2 Teaching and Learning

Fig. 6.1: Effective Implementation of Curriculum
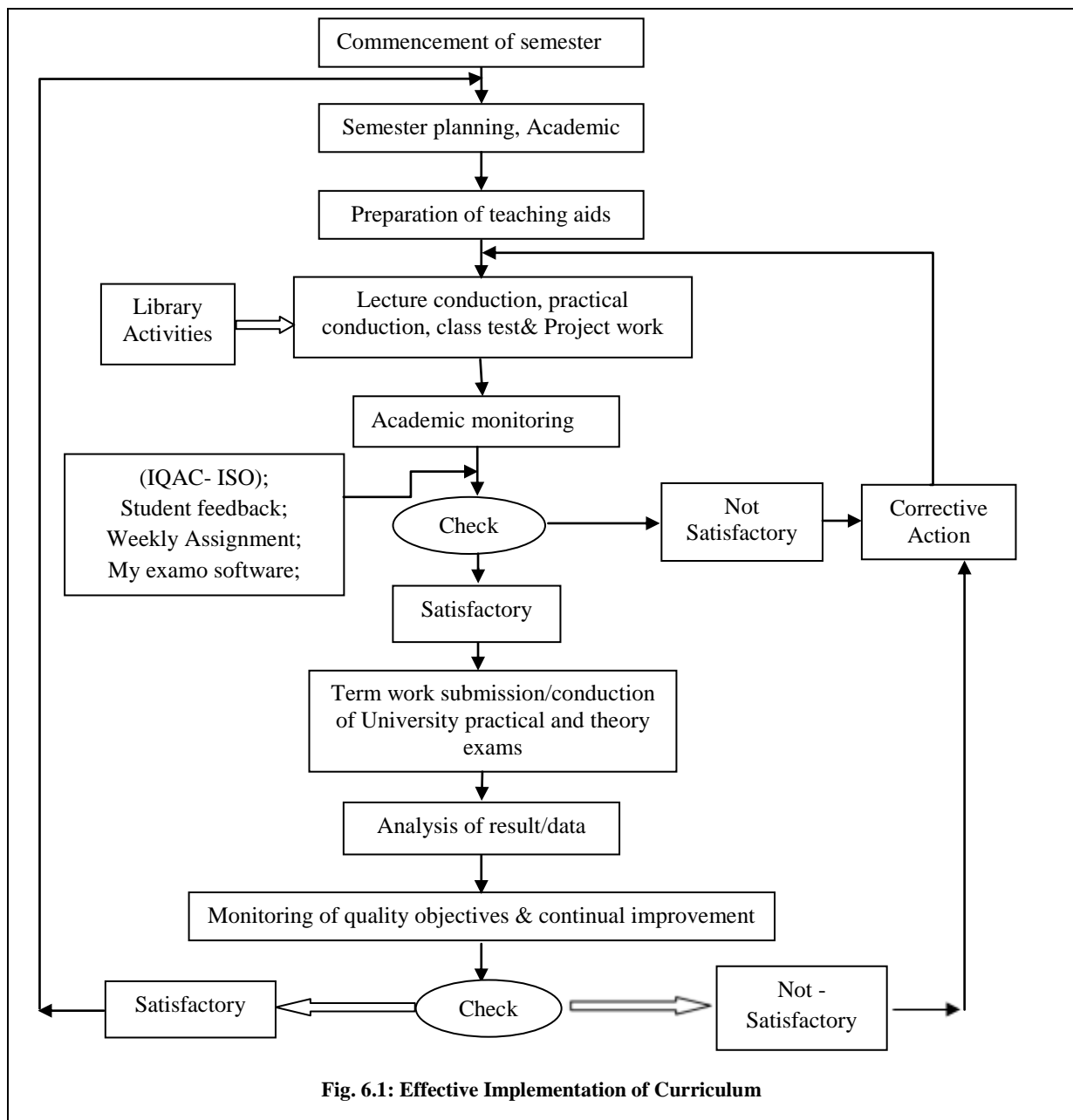
Quality Improvement Initiatives taken by Institute

1. Finding out the gaps in institute and industry and try to bridge the gaps using bridging the gaps programs.

2. Giving over and above to the students than the curriculum.

3. Opting more and more advanced electives.

4. Interactive classes.

5. Innovative teaching and learning methods.

6. Learner centric approach.

7. Internal assessments to crosscheck learner understanding.

8. Regular RCV conduction.

9. Remedial classes for students.

10. Study Circle activities.

11. Mini projects.

12. Unit Tests and Prelim exams other than university calendar.

13. Provision of e-learning resources in Central Library.

14. Delivery of add-on-courses with external agencies.

15. Conduct of pre-placement training classes and campus connect programmes.

16. Student feed-back on teachers and necessary follow-up.

17. Pearson Education video lectures, NPTEL, Khan Academy lectures, webinars, NME-ICT workshops conduction facility.

18. Digital Library, Audio Visual Facility, Virtual classroom.

19. Soft Skill Lab, language lab equipped with Lingua phonic facility.

20. Weekly Assignments are given to the students to have writing practice.

21. Paper solution is prepared for every subject by faculties and same is discussed with the students after the unit test examination. It helps to improve the performance of students.

22. My Examo software is used for hands on practice of Online Multiple Choice Questions for students.

6.3.3 Examination and Evaluation (refer: 2.8)

Institute adheres to the examination/ evaluation rules and regulations framed by

Savitribai Phule Pune University, Pune. University conducts

1. Online examinations for First year & Second year Engineering.

2. In semester examinations for Third year & Final Year Engineering.

3. End semester examination for FE to BE.

Other than this Institute conducts

1. Weekly Assignments

2. Self-Learning Assignments.

3. Mock online examination

4. Internal Class test.

5. Pre University test.

6. Performance is evaluated and conveyed through SMS to the Parent.

6.3.4 Research and Development

1. Submission of minor and major projects to BCUD and various funding agencies.
2. Promotion to in-house research by offering seed money.
3. Promoting faculty and students for research activities at PG and PhD level.
4. Organizing Workshops and seminars for the R & D proposal writing and submissions.
5. Encouragement to staff for publications and patent forms.
6. Financial assistance for student's innovative projects and models
7. Additional NVIDIA GPU Education Centre (CUDA teaching centre).
8. Revenue generated through consultancy.

6.3.5 Library, ICT and physical infrastructure / instrumentation

For Library Quality Improvement following Strategies & Services are provided:-

- Digital and e- Library with institutional memberships.
- Book Bank Scheme
- Institutional Repository
- Book Bank Scheme for S.C/S.T Students
- Web OPAC (Online Public Access Catalogue)
- Advance Learner Facility
- Scanning Service
- Reprographic Service
- Printing Service
- Internet/ Wi-Fi Facility

No. of Books and e-journals available as follows:

	Existing		Newly added		Total	
	No.	**Value**	**No.**	**Value**	**No.**	**Value**
Text Books	59678	2,00,66,162/-	2590	21,29,453/-	62268	2,21,95,615/-
Reference Books						
e-Books	261	--	0	0	261	0
Journals	122	3,11,543/-	01	2,500	123	3,36,195
e-Journals	4867	16,70,134/-	00	00	4867	17,55,106/-
Digital Database	06		00	00	06	
CD & Video*	447	--	1043	00	1490	--
Others (specify)	--	--	--	--	--	--

- **Digital Databases E-Journal Packages & Journals 2016-17**

Sr. No.	Publisher	Subject Area	E-Content
1.	IEEE	Computer Engineering + Computer Science + Electrical & Electronics Engineering Telecommunications & Related disciplines	IEEE ALL-Society, Periodicals, Packages(ASPP)161Journals Plus Back file to 2005(R.P.)
2.	Pro-Quest	Management +Engineering	3889 Titles,18000 Full Text Dissertation,16000 working papers, Business cases & case study collection & More
3.	Science Direct	Engineering	275 E-Journals
4.	DELNET	Computer Engineering	--

- **Library Physical Infrastructure:**

Total Area Utilized for Library is 1222 sq.m.

6.3.6 Human Resource Management

1. Deputation of Staff for FDP / Workshops / Training / Conferences / Symposium.

2. Faculty encouragement for higher studies.

3. Formulation of institute policies and communicating the same to the staff.

4. Systematic performance appraisal process.

6.3.7 Faculty and Staff recruitment

Transparent staff recruitment policy as per UGC/AICTE/ DTE/SPPU/ norms.

6.3.8   Industry Interaction / Collaboration (IIP Cell):

By association with Industries through

Guest Lecture/

Expert Lecture/

Workshops resource persons

Internship training program/

faculty orientation program

Industrial visits

6.3.9 Admission of Students:

Admission process is controlled by Directorate of Technical Education (DTE), Mumbai. However, for admission of students the institutes are performing following activities:

- Conduction of Admission orientation Sessions at different nearby junior colleges.

- Delivering Expert/Guest Lecture by faculties at various schools and colleges.

- Career counselling / Guidance session.

- Advertisement in newspaper/Radio & Social media.

6.4   Welfare schemes for

Teaching and Non-teaching	
Teaching Non-teaching Employees	**Teaching and Non-teaching** 1. Group insurance policy drawn for teaching and nonteaching staff (100%). 2. Funds availability to staff in case of medical emergency. 3. Maternity leave to ladies staff. 4. Gratuity scheme applicable. 5. Uniforms to class IV staff. 6. Tuition fees collected in Equal Monthly Installments (EMI) for wards of the staff. 7. 15 % fee waiver for wards of the staff members in schools run by Sanstha 8. Residential and recreational facility for the staff members. 9. Loan facility from staff society.
Students	1. Travel facility by college bus is provided for Akole, Sangamner and Sinnar resident students 2. Residential hostel facility is provided. 3. Group insurance policy. 4. Book bank facility 5. Earn and learn scheme

6.5   Total corpus fund generated: Rs. 100000/-

6.6   Whether annual financial audit has been done   Yes √   No --

6.7   Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	JAS-ANZ (Once in a year)	Yes	Internal Quality Audit Cell and ISO (Once in a semester)
Administrative	Yes	JAS-ANZ (Once in a year)	Yes	Internal Quality Audit Cell and ISO (Once in a semester)

6.8   Does the University/ Autonomous College declares results within 30 days

For UG Programmes   Yes √   No --

For PG Programmes   Yes √   No --

6.9   What efforts are made by the University/ Autonomous College for Examination Reforms?

NA

6.10   What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

NA

6.11   Activities and support from the Alumni Association

1. Alumni association organizes alumni meet every year, this helps the current students in their overall development.
2. Campus placement support is obtained from alumnae every year.
3. Financial help is also provided by some alumnae for financially weaker students.
4. Industrial visit, training and project to the students are arranged with the support of alumnae as a part of curriculum.
5. Advisory Committee is formed by association of Alumni

6.12   Activities and support from the Parent – Teacher Association.

> In our college we don't have Parent teacher association but every year by conducting parent meet in our college we try to communicate with parents by giving information about the new activities in college, teaching learning process, placement and try to understand their expectation form college and teacher. We also take feedback from parents regarding facilities provided by college, additional courses conducted for students, so that we can improve in next academic year through tutor/mentor programme.

6.13   Development programmes for support staff

> 1. Soft skill in Language Lab for 15 days.
> 2. Computer and Printer maintenance program was organized.

6.14   Initiatives taken by the institution to make the campus eco-friendly.

> Green audit is regularly conducted by checking water quality, noise level and energy consumption. Fire and Safety audit is conducted regularly. Energy audit is conducted for saving of electrical power. Solar water heaters used in boys and girls hostel. Also solar street lights are installed in campus. Hybrid power (5 KW Wind Solar) generation plant drives Electrical Engineering departments lighting road. Water harvesting is initiated and optimum use of water by drips and sprinklers. NSS conducted one day workshop on water management for active motivation among all the students to use minimum water. Dandkaranya Abhiyan and NSS are actively running for free plantation. Cleanliness is maintained in campus and less hazardous waste is generated. The major e-waste such as out of use instruments / equipment's, CRTs, Printers, Computers, Electronic gadgets, Circuits, Kits have been written off and then it is sold out to buyers by auctioning.

Criterion – VII

7. Innovations and Best Practices

7.1   Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- Departments are circulating information among stakeholders through digitized tools like Whatsapp, Facebook and Google groups. It is used in curricular and cocurricular processes to shares important technical and student related information.

- Sessions were conducted to groom competencies like Skill, Knowledge and Behaviour of students.

- Continues conduction of activities like Self-Learning, Study Circle, animated Videos, additional lectures for Teaching Learning Process.

- Student support services: Started for formalities free Leaving certificate withdrawal, Education loan documents, bonafide Certificates, etc.

- Developed Campus AVCOE mobile App.

- NPTEL study centre is established students and staff has registered and completed the various courses of all branches of engineering under this NPTEL forum.

- HAM radio club has initiated by E&TC Department where students are performing the various activities which will help the society in emergencies. Apart from this it is worked for hobbies. It creates the interest in students about the communication among unknown persons.

- Consultancies in antenna testing, EMI EMC analysis of antenna.

- **Standard penetration Test and Plate Load Test**: Plate load test and Standard penetration Test was Performed to find dry density and bearing capacity of soil. These tests were performed at three locations. Various tests were performed on different materials like paving material, wall and block testing. We have provided mix design of dry lean concrete for construction purpose.

- **Samprashikshan Internship Program:** Department of Civil Engineering has planned samprashikshan internship program for BE students by which they will get their bread and butter instantly after pass out from academic. Purpose behind this program is making student mentally robust and practically trained according to mission and vision of institute

- Soil sample was collected from the nearby area and following tests were performed on it:1. NPK test2. Electrical Conductivity test3. P^H test, Total 32 soil samples were collected and tested. Report card of testing are prepared and distribute to the land owner.

- **Big Data Analytics Centre Of Excellence:** Under Big Data Initiative 2 days Workshop on Big Data Analytics was conducted on date 7 and 8 February 2017 Resource Person was Mr. Tushar Kute, Mitu Skillologies, NashikNumber of Participants were 56 in numbers and Staff Coordinators are Mr. Sachin Arun Thanekar, Mr. Mubin S. Tamboli, Mr. Santosh S. Varpe. During this workshop the following Softwares Taught by Resource person are Hadoop 2.6.3, Mysql, MongoDB, Zeppelin, Cassandra, Sqoop, Hive, Yarn, HBase and Python.

- **AAKASH RESEARCH CENTRE:** In First Semester of 2016-17 A Application was built for Montessori Nido student which is studied in Amrutvahini International School. Final Year students developed a 2 application as a project.

- IT Department has conducted Certification course and technical lectures with awareness of competitive exam for student bridge the gap between university syllabus and academia and appreciates to the students who recognize by ORACALE professional certified.

- IBM academic initiative centre has conducted activities for the students

- MoU with Ministry of defence.

- Redhat Academy Partner is started for interaction and exchange of concepts with respect to vitality of global IT certification. (Certification course)

- IT Department has implemented open source lab and install different open source application.

- Personality Development sessions were planned and conducted for all TE & BE Electronics students.

- Department has initiated innovative, society and agriculture projects like Android Application of Fraud Indian Currency Detection ,Embedded Based Auto Green House Controller and Single Phase to Three Phase Supply Converter which were selected by Committee members From IIT, Pawai for Unnat Maharashtra Abhiyaan Scheme

- Departments have initiated innovative, society and agriculture projects like solar power auto rickshaw, wind mill setup.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- **To prepare and follow Academic Calendar:** At the beginning of semester, Institute calendar was prepared. After that department Academic Calendar was prepared. Every faculty prepares his teaching plan accordingly and follow it.

- **To identify slow and advanced learner students:** Based on earlier result analysis and mock test slow and advanced learner students were identified. Study circle was formed by which advanced learner students mentor the slow learner student. Also Batch wise, tutor wise students WhatsApp group created to share study material.

- **Student-tutor mentoring:** Through Student-tutor meetings conducted twice in a month by respective tutors, discussing their academic and non-academic issues which are then forwarded to Dean Academic through Department coordinator.

- **To increase no. of students with valid GATE scores.:** Value added course was conducted through GATE Imperial Pune.

- **In plant training for students:** Department identified few Industries in nearby industrial areas such as Nashik, Pune, Aurangabad, etc. which promotes students for In plant training.

- In overall ISO committee responsible for Monitoring of quality objectives & continual improvement beginning of the year. ISO Audit conducts internal and

external audit in which PDCA (Plan, Do, Check,and Act) are evaluated and corresponding corrective measures taken. During lastyear no any major discrepancies found.

- Before starting semester, planning of Academic, Co-curricular and extracurricular activities is circulated to all teaching, supporting staff and students.

- Academic monitoring conducted by senior faculties of another department for Lecture conduction, practical conduction. Also student's feedback is conducted for student's satisfaction. Notice is issued to faculties if performance of particular faculty is not Satisfactory.

- Feedback obtained and Opportunity is given at first time for teacher who have less feedback. Notice are issued to faculties with not improvement in feedback . At the end of semester term work submission completed based on continuous assessment and University practical and theory exams completed after which Results Analysis carried out and notice issued to those faculties if result is not satisfactory.

7.3   Give two Best Practices of the institution*(please see the format in the NAAC Self-study Manuals)*

1. "Amrut Meritorious Scholarship."(*annexure-i)*
2. "Effective implementation of Mentor Scheme- Teacher Student support system"

* The details are in Annexure-iii

7.4   Contribution to environmental awareness / protection

- This year also green audit have been conducted by regularly checking water quality, noise level and energy consumption also energy audit for checking electrical consumption. Every day water quality I academic building and hostels have been checked by supporting staff.

- Special persons are appointed for maintenance of garden which carries out regular tree plantation and resulted in pleasant atmosphere in campus.

- The trees and lawns are maintained with water drips and sprinklers respectively.

- Effective utilization of renewable energy is carried out by utilizing solar water heaters and solar street lights.

- NSS and *Dandakaranya Abhiyan are c*reating awareness among the young generation to protect and save the environment.

- Policy decision have been taken for less usage of papers and noise free generator etc.

- Every staff has obtained Maharashtra Haritsena membership and carried out activities.

7.5   Whether environmental audit was conducted?   Yes √   No --

7.6 Any other relevant information the institution wishes to add. (for example SWOC Analysis)

> **SWOC Analysis**
>
> **Strengths:**
>
> The strength of the institute includes
>
> - Sprawling campus spread over 25 acres away from city with calm and well maintained, pleasant environment, ample greenery and nonpolluting ambience.
> - NAAC accredited with 'A' grade.
> - Three times accreditation by NBA, New Delhi.
> - ISO 9001:2008 certification and updating to ISO 9001:2015.
> - Five UG courses permanently affiliated to SPPU, Pune.
> - Ranked in top among most renowned institutions as per the survey conducted by various agencies in past few years.
> - Adequate infrastructural facilities such as ICT enabled classrooms, well equipped laboratories with advanced equipment and machinery, auditorium, playground, hostels and gymnasium.
> - Well qualified and experienced staff.
> - Excellent teaching, learning environment with academic discipline and ambience.
> - High speed internet connectivity with a 40 mbps leased line and Wi-Fi campus.
>
> **Weaknesses**:
>
> - Situated in rural area.
> - Inadequate number of PhD qualified faculty.
> - Consultancy and extension activities need improvement.
>
> **Opportunities**:
>
> - Collaboration with leading research institutions and industries for research projects and consultancy.
> - Enhancing industry institute interactions.
> - Encouraging faculty for upgrading their qualification.
> - Establishing center of excellence in respective engineering disciplines.
> - To work out for interdisciplinary research projects.
>
> **Challenges:**
>
> - Attracting and retaining faculty having PhD qualification.
> - Imparting soft skills to the students from rural background.
> - Achieving 100% placements.
> - Attracting students with higher PCM and CET scores.
> - Development and transfer of technology useful for the rural masses.

8. Plans of institution for next year

- Plan to make admissions of high JEE/MHCET merit students and provide a curricular and extracurricular campus ambiance.
- Maintain appropriate teaching, learning environment to achieve Quality objectives defined.
- To do essentials to retain brand for AVCOE
- Initiation and structuring the research culture in AVCOE by organising International, National and state level events as well.
- Procure and deploy AICTE /BCUD /DST grants from Government sources
- Introduce 20 hour/semester value addition technical and Soft Skills development courses using AVCOE's infrastructure in evening sessions after regular college hours
- GATE and competitive exam Coaching.
- Offer lab. facilities, projects and product development for other institutes and industry
- Offer consultancy services.
- Purchase new Hydraulic & Pneumatic trainer kit, and gear test rig for IFPL Lab in Dept. of Mechanical Engineering.
- Purchase Sheet Metal Press and TIG welding machine in Workshop dept. for practical's of Mechanical and Production Engineering.
- Restructure CAM Lab. in Dept. of Production Engineering
- Create Switch gear and protection Lab., and computer Lab. II in Dept. of Electrical Engineering
- Organize inter institute cultural event "MEDHA-2017"
- Planning and establishment of incubation centre.
- Sponsored STTP by IIT kharagpur for electrical department.
- Governance of ethical and moral activities
- Under QIP –BCUD workshop, seminar @ national international and state level.
- Academic Planner for the academic year 2016-17 is attached in *Annexure –iv*

Prof. R. S. Tajane   *Dr. M. A. Venkatesh*

Signature of the Coordinator, IQAC   *Signature of the Chairperson, IQAC*

_____***_____

AmrutvahiniSheti&ShikshanVikasSanstha's

Amrutvahini College of Engineering, Sangamner
Department of Electrical Engineering
Academic Calendar: 2016-17
Semester-I (UG)

Quality Policy:
The Amrutvahini College of Engineering is committed to develop in young mind the state of the art technology & high academic ambience by synergizing spiritual values & technological competence continually in a learning environment.

Quality Objectives:
1. To strive hard for academic excellence & synergizing spiritual & moral values.
2. To improve overall development of Student.
3. To enhance industry-institute interaction.
4. To provide assistance for placement & entrepreneurship development.
5. To promote & encourage R & D activities.

June 2016

S	M	T	W	T	F	S
5		13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

July 2016

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

August 2016

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

September 2016

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October 2016

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Curricular Activities

Date	Activity	Remarks
13.06.16	Commencement of teaching(UG)/ Registration	
27.06.16	IQAC-Course File Checking	
29.06.16	Project Topic Finalization(B.E)/Seminar Topic Finalization(S.E/T.E)	
30.06.16	Tutor / Study circle meeting	
06.07.16	Ramjan Eid	
07.07.16	Commencement of teaching(MBA)	
15.07.16	Tutor / Study circle meeting	
16.07.16	Display Provisional detention	
18.07.16	Unit Test-I/ Feedback	
22.07.16	Feedback-Submission of report to office	
23.07.16	Display of result- Unit test-I	
30.07.16	Tutor / Study circle meeting	
01.08.16	In-Sem exam (TE & BE)	
13.08.16	Mid Term project/ seminar assessment	
15.08.16	Independence Day	
17.08.16	Patel	
18.08.16	Tutor / Study circle meeting	
19.08.16	Display Provisional detention list-II	
22.08.16	Unit Test-II	
27.08.16	Display of result- Unit test-II	
29.08.16	Tutor / Study circle meeting	
05.09.16	Shri. Ganesh Chaturthi	
12.09.16	Bakri Eid	
06.10.16	Concluding of Teaching	
07.10.16	Preliminary exam/ Feedback	
08.10.16	Detention List	
10.10.16	Submission	
13.10.16	Mock Practical Exam/Remedial Classes	
27.10.16 15-	University Oral/ Practical examination	
30.11.16 04-	Theory examination (UG)	

Total Working Days = 90

Note:
1. The Principal /HOD meeting will be on every Monday at 10.00 am.
2. The Departmental meeting by HOD will be on every Monday at 4.00 pm.
3. The General meeting of all faculty members will be on First and Last day of the Term at 4.00 pm.
4. Ref.No. PGS/1854 28/05/2016 Academic Planner SPPU

Co-curricular Activities

Date	Activity	Remarks
24.06.16	Guest Lecture (Deptt.Assoc.)	
29.06.16	Technical quiz	
30.06.16	Mock Interview (TE&BE)	
01.07.16	Industrial Visit (SE)	
05.07.16	Aptitude test (BE)	
06.07.16	Guest Lecture	
13.07.16	Value Added Course	
15.07.16	Technical quiz	
20.07.16	Aptitude test (BE)	
22.07.16	Debate (Deptt.Assoc.)	
03.08.16	Soft skill training	
05.08.16	Group Discussion	
10.08.16	Mock interview (TE &BE)	
12.08.16	Ex-tempore	
19.08.16	Industrial Visit(TE)	
24.08.16	Guest Lecture (Student Chapter)	
26.08.16	Industrial Visit(BE)	
31.08.16	Alumini Interaction	
02.09.16	Workshop/ Training	
07.09.16	Group Discussion	
09.09.16	Technical quiz	
14.09.16	Workshop/ Training	
16.09.16	Guest Lecture (Deptt.Assoc.)	
21.09.16	Aptitude test (BE)	
23.09.16	Group Discussion	
26.09.16	Debate (Deptt.Assoc.)	
28.09.16	Mock interview (TE &BE)	
30.09.16	Aptitude test (BE)	

July 2016	Value Added Courses/ Industrial Visit	
Aug 2016	Soft skill Training/Workshop	
Sept 2016	Conference/Seminar	

Principal
AVCOE, Sangamner

ACAD-R-02:Rev.01, 10-06-2015

AMRUTVAHINI COLLEGE OF ENGINEERING., SANGAMNER-422605

ACTIVITIES CALENDER — YEAR 2016-2017

GENERAL / **SEMESTER II**

Key readable activities by month:

- **December** — NO OF WORKING DAYS=15
- **January** — NO OF WORKING DAYS=22; Online Phase - I FE, SE; MCQ MOCK TEST FE, SE & DM; Republic Day; Christmas; Commencement of FE PM
- **February** — NO OF WORKING DAYS=22; MCQ MOCK TEST FE, SE & UNIT TEST-1 TE, BE; Feedback F.E. S.E.T.E & B.E; Dulivandan; Mahashivratri
- **March** — NO OF WORKING DAYS=26; Online Phase – II F.E., S.E. & Insem Exam T.E. & B.E; Ram Navmi; Ambedkar Jayanti; Feedback F.E. S.E.T.E & B.E
- **April** — NO OF WORKING DAYS=05; Conclusion F.E; PRELIM EXAM SE,TE,BE; Conclusion & Submission S.E., TE,BE
- **May** — NO OF WORKING DAYS=01; Maharashtra Din; Conclusion M.E; PRELIM EXAM SE,TE,BE & DM; Gudipadwa

PM - Principal Meeting   17
DM - Departmental Meeting   17

Practical/Oral Project Examination S.E. T.E. & B.E : 10/04/2017 to 27/04/2017
Practical/Oral Project Examination M.E. I & II : 05/05/2017 to 13/05/2017

TOTAL NO. OF WORKING DAYS: F.E.: 75 S.E. T.E. & B.E : 69 T.E. & B.E : 75 M.E.: 61
Theory Examination S.E. T.E. & B.E : 02/05/2017 to 29/05/2017
Theory Examination M.E : 17/05/2017 to 30/05/2017

Prof. A.K.Mishra
(Vice-Principal)

Dr. M. A. Venkatesh
(Principal)

Amrutvahini College of engineering has well established feedback mechanism. Ananosoft Technology Pvt. Ltd. is our service provider for online feedback.

- **Feedback types & modes**

Sr. No.	Feedback type	Frequency	Mode	Standard Out come
1	Student Feedback (Overall Academic Performance)	One's in year	Manual	Stated in ISO Qua. Obj.
2	Teacher Performance by student	Twice in Sem.	Ananosoft/Manual	75%
3	Student to Institute	Twice in Sem.	Ananosoft	Suggestions
4	Student to Library	One's in year	Manual	Suggestions
5	Lab Assistant / Technical Assistant	One's in Sem.	Manual	Suggestions
6	Teacher to student	One's in year	Ananosoft	Suggestions
7	Teacher to Institute	One's in year	Manual	Suggestions
8	Hostel	One's in year	Manual	Suggestions
9	Parents	Meet/ Walking	Manual	Suggestions
10	Employer	Feasibility	Manual/Mails	Suggestions
11	Alumni	Meet/ Walking	Manual/Mails	Suggestions

The feedback on faculty performance by students was conducted for odd& even semester. The details are given in following table

- **Report on feedback- odd semester 2016-17**

Programme	Feedback no.	% of respondent	No. of faculty scored less than threshold value (75%)
UG	1	87.26	00
	2	83.49	00
PG	1	82.67	00
Intimations were issued for the faculties having feedback less than 75% for improving their performance.			

- **Report on feedback- even semester 2016-17**

Programme	Feedback no.	% of respondent	No. of faculty scored less than threshold value (75%)
UG	1	85.84	00
	2	77.83	01
PG	1	87.20	00
Intimations were issued for the faculties having feedback less than 75% for improving their performance.			

7.3.1 Best Practice 1.

1. Title of the Practice: *"Amrut Meritorious Scholarship."*

2. Objectives:
- To uplift the overall quality result of the students.
- To make the students competitive in academics by honoring them.
- To provide financial support for the scholar students.

3. The Context
- Any Institute need to develop the students who can meet the requirements of the stakeholders with good academic result.
- Teaching and learning activity is the most important activity in educational institute. So it requires the equal involvement of teachers as well as the students for particular topic to be understood.
- Students involvement plays important role in academic result hence quality results hence it needs to make them competitive by providing some platforms.

4. The Practice
- Amrut Meritorious scholarship (AMS): If the student will get more than 80% or more than 9.5 SGPA in particular semester then after declaration of result the scholarship will be given to those students in next semester with Rs.1000/- per month for six months which cover total of Rs. 6000/- per semester.
- Every semester notice is circulated to all the students about Amrut Meritorious scholarship and awareness is created among them.
- The Institute has adopted ISO 9001-2008 policy by maintains the academic discipline and good learning environment.
- All faculties are attempting to cover complete syllabus by effective teaching and learning system has outcome in better results.
- The institute has taken initiative in arranging makeup classes to complete syllabus in scheduled period.
- Study circle activities are carried out in batch-wise in which high merit students discuss and solve the syllabus, practical related queries of other students.
- Skill based activities are initiated for the students which clears the theoretical and practical concepts in detail.
- For better performance in online examinations, web based multiple choice questions (MCQ) bank is provided to students and also practice sessions are conducted.
- Teaching learning is well supported by state of art equipment and infrastructural learning facilities.

- Mentor scheme for students counseling includes one faculty member for maximum 20 students, who conducts regular meeting and discuss academic progress.
- Students are assigned self-learning assignments based on web material, Text books, reference books and NPTEL video lectures.

5. Evidence of Success
- The evidence of improved system is reflected in student academic results
- Following are the details of Students who received Amrut Meritorious scholarship (AMS).

No of Students in AMS in

Department	Mech	Prod	Civil	Comp	IT	E&TC	Elex	Elect	FE
2016-17 Sem I	02	02	01	00	00	02	00	02	08
2016-17 Sem II	01	01	02	01	00	03	01	01	09

- Student's quality results are improved and they become competitive.
- Students have to maintain their consistency in quality result for the benefit of scholarship.

6. Problems Encountered and Resources Required
- An individual role of the student is very much important in this activity.
- Number of students benefitted is still in less number but it creates attentions towards quality result.
- Students having less percentage are not even think of this scholarship.
- Revaluation results are declared late so some of the students may include late in scholarship.

7. Notes:
For effective involvement of average students stepwise percentage plan is to be implemented.

7.3.2 Best Practice 2

1. Title of the Practice

"Effective implementation of Mentor Scheme- Teacher Student support system"

2. Goal

The aim of institute is to,

- To provide the opportunities for students for sharing their personal interests, expectations, problem facing in academics and hostels.
- To obtain feedback about facilities and services provided in campus and rectify them.
- To identify the students who needs special attentions e.g. extraordinary or mentally weak student.

3. The Context

Amrutvahini College of Engineering, Sangamner provides education with residential facilities. It is always important to have dialogue between teacher and Students about the academic understanding, quarry, method of study, practice of problems, examination pattern, students' individual progress in academics and cocurricular activities. Also feedback to be obtained about facilities and services provided in campus so that corrective actions can be initiated for students satisfaction.

4. The Practice

At start of semester three to four depending upon strength of student's batches are formed and one tutors/ mentors is assigned for each batch. Every teacher is associated with 20 students and having all the details about the student. All batch wise students' gathers with mentor as per tutor meeting schedule. Teacher discuss about academic understanding, query, method of study, practice of problems, examination pattern, students' individual progress in academics and cocurricular activities and feedback about facilities and services provided in campus. Also care is taken to identify the students who needs special attentions e.g. extraordinary or mentally weak student. He resolves some queries which can be justified. If major queries are raised that would be forwarded to class teacher and subsequently to principal through head of department. Special discussion in HOD's meeting will be held or decision would be made for those queries and concern staff is instructed to work out. Student class as well as tutor Whats App groups.

5. Evidence of Success:

Number of tutor meetings conducted in 2016-17 and main queries raised as well as status of query are provided below.

Department	Major queries raised	Status of Query	Worked by Department	Students satisfaction
2016-17 Sem I	Drinking water problem	Solved	Water supply Department	Yes

	Ladies mess food quality	Solved	Hostel Rector	Yes, HODs are also monitoring.
2016-17 Sem II	Canteen cleanliness	Solved	Hostel Rector	Yes, HODs are also monitoring.

6. Problems Encountered and Resources Required

Special times to be allocated for tutor meetings. Students at first don't come up with the queries so teachers have to make them comfortable by simple introductions and other informal issues. Record keeping and follow-up to be taken up to student's satisfaction.

7. Notes: Regular conduction of tutor meeting keeps track of students' individual progress in academics and co-curricular activities.

Academic Calendar for Sem-I for 2017-18

AMRUTVAHINI COLLEGE OF ENGINEERING., SANGAMNER-422605

June (NO OF WORKING DAYS=13)

DAY	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI
DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ACTIVITIES								Faculty Reporting				PM	DM		Commencement of S.E., T.E. B.E				PM	DM					Ramjan Eid	PM & DM				

July (NO OF WORKING DAYS=26)

DAY	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON
DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ACTIVITIES			PM	DM					PM	DM						PM	DM						PM	DM				Mock INSEM TE,BE UT1 SE	Mock INSEM TE,BE UT1 SE		Mock INSEM TE,BE UT1 SE

August (NO OF WORKING DAYS=24)

DAY	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU
DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ACTIVITIES	DM LP	LP	LP	LP	LP		PM	DM & INSEM (Univ.)	INSEM (Univ.)	INSEM (Univ.)	INSEM (Univ.)		PM	Independence Day	DM	Pateti		PM	DM				Ganesh Chaturthi				PM	DM	

September (NO OF WORKING DAYS=25)

DAY	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ACTIVITIES				PM & UT2 (SE)	DM & UT2 (SE)	UT2 (SE)				PM	DM						PM	DM						PM	DM					Dasara

October (NO OF WORKING DAYS=14)

DAY	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE
DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ACTIVITIES		Gandhi jayanti	PM & DM						PM & Prelim SE,TE,BE	DM & Prelim SE,TE,BE	Prelim SE,TE,BE	Prelim SE,TE,BE	Prelim SE,TE,BE	Submission		Submission	Submission	Conclusion of Semester-I	Diwali	Balipratipada				PM	DM & Starting Univ. Exam. Oral						

November (TOTAL NO OF WORKING DAYS=104)

DAY	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU
DT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ACTIVITIES				Gurunanak jayanti		PM	DM		End of Univ.Exam. Oral,Practical/Project			PM	DM		Starting of Univ.Theory Exam				PM	DM						PM	DM			

Practical/Oral/ Project Examination S.E. T.E. & B.E : 24/10/2017 to 09/11/2017
PM - Principal Meeting   DM - Departmental Meeting   LP - Learning

Theory Examination S.E. T.E. & B.E : 14/11/2017 to 11/12/2017

Dr. M R Wakchaure	**Prof. A.K.Mishra**	**Dr. M. A. Venkatesh**	ACAD-R-01, Rev.: 00 Date: 16-06-2015
(Dean Academics)	**(Vice-Principal)**	**(Principal)**	

Sr. No.	Activities Planned	Remark
1	Display of Master Time Table and Distribution of Individual Time Table	
2	Start of Semester Meeting by Principal	
3	Students Registration	Start of semester
4	Commencement of Teaching (U.G.)	
5	Course File Checking by IQAC	Start of semester
6	Tutor / Study Circle Meeting	Once in a month
7	Guest Lecture	Once in a month
8	Commencement of Teaching (MBA)	
9	Mock interview (T.E. & B.E.)	End of semester
10	Guest Lecture	
11	Students Association Activities (GD, Debate, TQ, etc.)	
12	Commencement of Teaching (M.E.)	
13	Industrial Visit (S.E.)	Once in a semester
14	Seminar Finalization (M.E. / T.E.)	
15	Tutor / Study Circle Meeting	
16	Unit Test-I/ Feedback	
17	Feedback/ Monthly Attendance Record Submission	
18	Display Provisional detention - I	Once in a semester
19	Tutor / Study Circle Meeting	
20	Annual Social Gathering	Once in a year
21	Alumni Meet	Once in a year
22	Online Exam (F.E. & S.E.)	
23	In-Sem Exam (T.E. & B.E.)	Once in a semester
24	Alumni Interaction	
25	Mid-term Project assessment	Once in a semester
26	Mock interview (T.E. & B.E.)	
27	Students Association Activities (GD, Debate, TQ, etc.)	
28	Tutor / Study circle meeting	
29	Unit test II/ Feedback	Once in a semester
30	Feedback/ Monthly Attendance Record Submission	
31	Guest Lecture	
32	Display Provisional detention - II	Once in a semester
33	International/National Level Event	Once in a year
34	Online Exam (F.E. & S.E.)	
35	Students Association Activities (GD, Debate, TQ, etc.)	
36	Guest Lecture	
37	Tutor / Study circle meeting	
38	Mock interview (T.E. & B.E.)	
39	Concluding of Teaching	
40	Concluding Meeting by Principal	

41	Preliminary exam/ Feedback	Once in a semester
42	Feedback/ Monthly Attendance Record Submission	
43	Detention List	Once in a semester
44	Internal ISO Audit	Once in a semester
45	Mock practical exam & remedial classes	
46	Submission	
47	Concluding of Teaching (M.E.) (P.G.)	
48	Subject Distribution for Next Semester	
49	Concluding of Teaching MBA	
50	Theory examination (U.G.)	
51	University Oral/ Prac. exam (U.G.)	
52	University Oral/ Prac. exam (P.G.)	
53	Theory examination (P.G.)	
	* The Principal /HOD meeting every Monday at 2.30 pm	
	* The department meeting by HOD meeting every Tuesday at 4:00 pm	
	* One Value Addition course for each class (U.G.) per semester	
	* IQAC Checks the lectures and practical's of all faculty once per semester	

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