

Use of Cell Phones

It has been decided **not to permit cell phones inside the college campus**. If any student is found using the cell phone inside the college campus, it would be confiscated and will not be returned back on any circumstances. Hence the students are instructed not to attend the college with the mobile phones.

Dress Code

The students are requested to attend the college neatly dressed. While the male students should attend the college with the shirts neatly tucked in and with the shoes, the female students are permitted to come with churidar and dupatta properly pinned. Students wearing full hand shirts should wear it as such without folding it to half etc. Casual wears like jeans, T-shirts etc., both for boys and girls are strictly prohibited inside the campus. Each department has prescribed uniforms for the labs. The students are requested to strictly adhere to the dress codes as well as the rules and regulations of the college.

Maintenance of Discipline

Discipline is an important factor that shapes one's personality. It is considered as a golden key capable of opening many doors. This institution expects each and every student to follow the rules and regulations in total. Maintaining discipline in the campus will promote a conducive environment for studies.

Working hours

I hour	08.45 a.m	to	09.35 a.m
II hour	09.35 a.m	to	10.25 a.m
III hour	10.25 a.m	to	11.15 a.m
Break	11.15 a.m	to	11.30 a.m
IV hour	11.30 a.m	to	12.20 p.m
V hour	12.20 p.m	to	01.10 p.m
VI hour	01.50 p.m	to	02.40 p.m
VII hour	02.40 p.m	to	03.30 p.m
VIII hour	03.30 p.m	to	04.20 p.m

Lunch break 1.10 p.m. to 1.50 p.m.

SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

An Autonomous Institution

(Accredited by NBA-AICTE, New Delhi, NAAC with "A" Grade)

Madagadipet, Puducherry - 605 107



Academic Calendar

October 2022 to March 2023

Name :

Programme : B.Tech.

Department : Biomedical Engineering

Year / Sem : I Year / I Semester

நீங்கள்



அன்பு செய்ப்புங்கள், யாருக்கும் அடிமையாகாதீர்கள்;
இரக்கம் காட்டுங்கள், எவரிடத்தும் ஏமாந்துவிடாதீர்கள்;
பணிவைப் போற்றுங்கள், எந்த நிலையிலும் கோழையாகாதீர்கள்;
கண்டிப்பாக இருங்கள், எப்போதும் கோபப்படாதீர்கள்;
சிக்கனமாக வாழ்வுங்கள், கருமியாக மாறாதீர்கள்;
வீரமாக இருங்கள், போக்கிரிகளாக மாறாதீர்கள்;
சுறுசுறுப்பாக இருங்கள், பதட்டம் அடையாதீர்கள்;
வாயுளைத் தேடுங்கள், பேராசைப் படாதீர்கள்;
உழைப்பை நம்புங்கள், உருப்படுவீர்கள்;
உண்மையை நம்புங்கள், உயர்வடைவீர்கள்!

என்றும் அன்புடன்.
ஆசிரியர்கள்.

About Autonomous

Sri Manakula Vinayagar Engineering College has been conferred with Autonomous Status by the University Grants Commission on 26th September 2019 and the same was approved by Pondicherry University on 19th June 2020. SMVEC Autonomous Regulations R2020 is followed for the students admitted from the Academic Year 2020-21 onwards.

Awards and Credentials

Our Institution got many awards and credentials since its inception. Some of the credentials achieved during the academic Years 2020-21 and 2021-22 are :

- ❖ Data Quest ranked in 46th position among the top 100 Technical schools overall in India 2021-22
- ❖ Winner of International Blockchain skill summit hackathon 2022
- ❖ Winner of Unisys Innovation (Y13) 2022
- ❖ Winner of Smar India Hackathon - 2022
- ❖ Winner of Virtusa Jatayu - 2022
- ❖ 4-Star rating from IIC-MHRD Innovation Council, New delhi
- ❖ ATAL Ranking award - ARIIA 2021 ranked in the "Excellent Band Category"
- ❖ Edufuture Excellence award and e-campus Award from Zee News - 2021
- ❖ Virtusa Campus Partner
- ❖ Best Engineering College from National Educational Excellence Award

HIGHLIGHTS OF SMVECAUTONOMOUS REGULATIONS

- ❖ Industry 4.0 ready curriculum
- ❖ Focus on Multidisciplinary and skill development courses to create extensive career opportunities
- ❖ Certifications Courses
- ❖ Internships
- ❖ Orientation towards entrepreneurship
- ❖ Choice to learn IELTS / Foreign Languages
- ❖ Supplementary Examination in 5th and 8th semester for the students having maximum of 2 arrears

Certification Courses

We provide 91 International Associate level Certification courses through 17 Centre of Excellences from IBM, Google, Cisco, Microsoft, Autodesk, Texas instruments, Festo, Bentley, Schneider Electric, Amazon web services, Siemens, Tally, DELL, EMC, Harita Techserv, PTC, LN and Excellence in Technology & Didactic solutions. All students should enrol in one certification course from semester I to VI.

Industrial Training / Internship

Students may undergo training or internship during summer / winter vacation at an Industry/ Research organization. Students are also permitted to undergo internships during their eighth semester after the completion of theory classes.

March 2023

Date	Day	Schedule	Working day/ Holiday
1	Wed	End Semester Practical Exam Starts	
2	Thu		
3	Fri		
4	Sat		
5	Sun		Holiday
6	Mon		
7	Tue		
8	Wed		
9	Thu		
10	Fri		
11	Sat	End Semester Practical Exam Ends	
12	Sun		Holiday
13	Mon		
14	Tue		
15	Wed		
16	Thu		
17	Fri		
18	Sat		
19	Sun		Holiday
20	Mon		
21	Tue		
22	Wed		
23	Thu	End Semester Theory Exam Starts	
24	Fri		
25	Sat		
26	Sun		Holiday
27	Mon		
28	Tue		
29	Wed		
30	Thu		
31	Fri		

Total number of working days :

Total number of holidays :

சலித்துக் கொள்பவன் ஒவ்வொரு வாய்ப்பிலும் உள்ள ஆபத்தைப் பார்க்கிறான்.
சாதிப்பவன் ஒவ்வொரு ஆபத்திலும் உள்ள வாய்ப்பினைப் பார்க்கிறான்.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**PEO1: Professional Skills**

To become outstanding professionals to demonstrate their skills in solving challenges for healthcare diagnosis

PEO2: Higher Education and Research

To work successfully in multi-disciplinary environments or pursue higher studies

PEO3: Entrepreneurial Competencies

To address the challenges in biomedical engineering that supports employment and entrepreneurship to serve the society.

PEO4: Leadership Quality

To enable the graduates to exhibit leadership, make decisions with ethical responsibilities

PROGRAMME SPECIFIC OUTCOMES (PSOs)**PSO1: Knowledge in Biomedical Engineering**

Comprehending fundamental concepts in Biomedical Engineering to meet the emerging trends

PSO2: Problem Solving in Medical Diagnosis

Apply Bio Signal and Image processing techniques to solve real time problems in medical field

PSO3: Troubleshooting of Medical Equipments

Troubleshoot the faulty medical Equipment's used in health care industry.

January 2023

Date	Day	Schedule	Working day/ Holiday
1	Sun	New Year	Holiday
2	Mon	Syllabus coverage and Submission	55
3	Tue	CAT - II (1½ units)	56
4	Wed		57
5	Thu		58
6	Fri		59
7	Sat		60
8	Sun		Holiday
9	Mon		61
10	Tue		62
11	Wed		63
12	Thu	Submission of Attendance and Assessment-II	64
13	Fri	CAT- II Result Analysis and Report Submission	65
14	Sat		Holiday
15	Sun	Pongal	Holiday
16	Mon	Uzhavar Thirunal	Holiday
17	Tue	Thiruvalluvar Day	Holiday
18	Wed		66
19	Thu		67
20	Fri		68
21	Sat		69
22	Sun		Holiday
23	Mon		70
24	Tue		71
25	Wed		72
26	Thu	Republic Day	Holiday
27	Fri		73
28	Sat		74
29	Sun		Holiday
30	Mon	Online Feedback-3 from the students and Analysis	75
31	Tue	QCM - 3	76
Total number of working days : 22			
Total number of holidays : 09			
வபருமைக்காகத் தேடிப் பெறுவது அல்ல... வபற்றதைக் கண்டு வபருமைத் தேடிக் கொள்வது - ஆதிரா			

December 2022

Date	Day	Schedule	Working day/ Holiday
1	Thu	Assignment - I	29
2	Fri		30
3	Sat	Syllabus coverage and Submission/ SCC / GP / Seminar / GL / Placement	31
4	Sun		Holiday
5	Mon	CAT I (1½ units)	32
6	Tue		33
7	Wed		34
8	Thu		35
9	Fri		36
10	Sat	GL / Placement / Academic Activities	37
11	Sun		Holiday
12	Mon	Submission of Attendance and Assessment-I	38
13	Tue		39
14	Wed		40
15	Thu	CAT- I Result Analysis and Report Submission	41
16	Fri		42
17	Sat		Holiday
18	Sun		Holiday
19	Mon		43
20	Tue		44
21	Wed		45
22	Thu		46
23	Fri		47
24	Sat	Special coaching class / GP / Seminar / GL / Placement / Academic Activities	48
25	Sun	Christmas	Holiday
26	Mon	Online Feedback-2 from the students and Analysis	49
27	Tue	QCM - 2	50
28	Wed		51
29	Thu		52
30	Fri	Assignment - II	53
31	Sat	Special coaching class / GP / Seminar / GL / Placement / Academic Activities	54

Total number of working days : 26

Total number of holidays : 05

தலை குனிந்து என்னை பார், தலைநிமிந்து உன்னை நடக்க வைப்பேன் - புத்தகம்

PROGRAM OUTCOMES (POs)

Engineering graduates will be able to

- PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- PO2: Problem analysis:** Identify, formulate, review, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety and the cultural, societal and environmental considerations.
- PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
- PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- PO6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.
- PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
- PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

October 2022

Date	Day	Schedule	Working day/ Holiday
1	Sat		
2	Sun	Gandhi Jayanthi	Holiday
3	Mon		
4	Tue	Saraswathi Pooja	Holiday
5	Wed	Vijayadashami	Holiday
6	Thu		
7	Fri		
8	Sat		
9	Sun		Holiday
10	Mon		
11	Tue		
12	Wed		
13	Thu		
14	Fri		
15	Sat		
16	Sun		Holiday
17	Mon		
18	Tue		
19	Wed		
20	Thu		
21	Fri	First year Induction Day	
22	Sat		Holiday
23	Sun		Holiday
24	Mon	Deepavali	Holiday
25	Tue		
26	Wed		
27	Thu	AICTE Induction Programs starts	1
28	Fri		2
29	Sat		3
30	Sun		Holiday
31	Mon		4

Total number of working days : 04

Total number of holidays : 01

என்னிடம் சிறப்பாக தனித்திறமை என்று எதுவுமே இல்லை
என்னிடம் இருப்பது ஆர்வம் மட்டுமே - ஐயன்என்

- ❖ The student shall be considered for exemption from the prescribed attendance requirement for the reasons stated above and if exempted, the student shall be permitted to appear for the end semester examination of that course. In all such cases, the students should have submitted the required documents on joining after the absence, to the Head of the Department through the Class Advisor.
- ❖ If any student is suspended for any reason during the semester, the days of suspension of a student on disciplinary grounds will be considered as days of absence for calculating the percentage of attendance for each individual course.

Provision for Withdrawal from Examination

- ❖ **Complete Withdrawal (applicable only for nil arrear students):** A student, who is eligible to appear for the semester examinations, will be permitted to withdraw from appearing for the entire End Semester Examinations as one unit (*Complete Withdrawal*) for valid reasons and on the recommendation of the Head of the Department and with the approval of the Dean Academics. Complete Withdrawal application shall be made before the commencement of the first examination pertaining to the semester. Such withdrawal shall be permitted **only once** during the entire programme.
- ❖ A student who has completely withdrawn from appearing for end semester examinations in a particular semester should appear for the examinations of all the withdrawn subjects in the next semester itself.
- ❖ If all other conditions are satisfactory, the candidate who withdraws is also eligible to be awarded **DISTINCTION** whereas he/she is not eligible to be awarded a rank.

Punctuality in Attendance

The students are requested to keep up punctuality in attending the college. The late comers will be losing their attendance and in turn the internal marks. Hence all the students are requested to attend the college in time. A student shall be permitted to appear for the End Semester Examination at the end of the semester only if he / she **secures not less than 75% of overall attendance.**

Redo Category

A student who secures overall attendance less than 60% has to repeat the course with the approval, when it is next offered. A student secures attendance greater than or equal to 60% and less than 75% will be promoted to next higher semester only if loss of attendance is due to medical reasons(hospitalization/ accident/illness) or participation in sports event or any competitions or NCC or NSS activities with prior permission from the Head of Institution through the Head of the department with necessary supporting documents and payment of necessary condonation fee as prescribed by the college authority. However student secures more than 75% of attendance in the current semester will be moved to next higher semester.

**Marks Distribution of Continuous Assessment Marks (CAM) and
End Semester Examination Marks (ESM)
Scheme for Continuous Assessment Test (CAT)**

S. No	Course Type	Continuous Assessment components									
		Test Marks	Average of pre/post test/ viva for each experiment	Average of marks for experiment report for each experiment	Model Exam / Report	Assignment	Review - 1	Review - 2	Review - 3	Attendance	Total
1.	Theory	15	-	-	-	5	-	-	-	5	25
2.	Practical	-	10	15	15	-	-	-	-	10	50
3.	Project Phase-I	-	-	-	-	-	15	15	20	-	50
4.	Project Phase-II	-	-	-	-	-	10	10	20	-	40

**The internal marks will be provided fully based on the continuous assessment tests
Weightage of Assessment for Theory Course**

S. No.	Test	Portion for Test	Test Marks	Duration of Test	Weightage for Internal
1	CAT 1	1½ Units	50	1 ½ hours	10
2	CAT 2	1½ Units	50	1 ½ hours	
3	Model	5 Units	75	3 hours	05
Continuous Assessment for Theory Course					15

Question Paper Pattern

Question paper for CAT and ESE will be based on the pattern shown in Table (a) and (b)

Table (a) Question Paper pattern for CAT/Model Exam

Test Type	2 Marks	5 Marks	10 Marks	Total Marks
CAT 1 / CAT 2	5(questions) (10 Marks)	4(questions) (20 Marks)	2 (questions) (20 Marks)	50
Model	End Semester Examination Question Pattern			75

Table (b) Question paper pattern for End semester Examination(ESE)

2 Marks	5 Marks	10 Marks	Total Marks
10(20 Marks)	5 (25 Marks) (one question from each unit)	3 (30 Marks) (one question from each unit)	75

End Semester Examination Question Paper Pattern for Six Units Courses

Course	2 Mark	5 Mark	8 / 9 Mark	Total Marks
Part A	5	2 (out of 3 questions, one from each unit)	one 8 mark question (out of 2 questions from Unit I and Unit II)	37
			One 9 mark question (compulsory question from unit III)	
Part B	5	2 (out of 3 questions, one from each unit)	Two 9 mark questions (out of 3 questions from IV, V & VI)	38

Important points for the kind attention of the Parents

Dear Parents !

Marks in the **continuous assessment test** decide the major part of the Continuous Assessment Marks. So, availing leave for the continuous assessment test must be avoided at any cost as this would seriously affect the continuous assessment marks.

Practicals are very important not only to score more marks but also it will help to understand the theory part of the subject. Hence advice your ward not to avail leave during practical classes.

Please spare your **valuable time to talk to your son/daughter every day and try to understand what he/she is doing in respect of his/her studies**. Kindly extend all your support to your son/daughter which will help them to come out successfully. For any assistance from our side you may always feel free to contact the respective Coordinator / HOD any time during the working hours.

Gold Medals and Top Ten Ranks

The details of the University Goldmedals and Top Ten Ranks bagged by our students are given below.

Year of Passing	Gold Medals	Top Ten Ranks
2012	9	58
2013	7	56
2014	7	56
2015	12	71
2016	8	72
2017	10	94
2018	11	74
2019	12	71

Gold Medals and Ranks

As per the Regulation 2020, for the Award of Gold Medal and ranks for each branch of study, the CGPA secured from 1st to 8th semester should be considered and it is mandatory that the candidate should have passed all the subjects from 1st to 8th semester in the first attempt. Rank Certificates would be issued to the first five candidates in each branch of study.

Distribution of Attendance marks for theory : 5 marks

The distribution of 5 marks for theory class attendance is as follows :
5 marks for 95% attendance and above
4 marks for 90% attendance and above but below 95%
3 marks for 85% attendance and above but below 90%
2 marks for 80% attendance and above but below 85%
1 mark for 75% attendance and above but below 80%

Distribution of Attendance marks for practical : 10 marks

The distribution of 10 marks for practical class attendance is as follows :
10 marks for 95% attendance and above
8 marks for 90% attendance and above but below 95%
6 marks for 85% attendance and above but below 90%
4 marks for 80% attendance and above but below 85%
2 marks for 75% attendance and above but below 80%

Note : Students should not be absent for the online classes/regular classes. Attendance for the online classes/regular classes are monitored systematically and recorded. Continuous assessment mark will be based on the performance of the students in the continuous assessment tests, assignment and attendance percentage.

Assignments : 5 marks

Out of 25 continuous assessment marks, 5 marks will be awarded for the assignment. The assignment questions will be different for each and every student. The students have to submit 3 assignments in each subject. The best 2 out of 3 assignments will be considered for marking.

Women Empowerment Cell

For the welfare of the girl students, a Women Cell has been constituted in the college. The girl students may approach the Chairperson / members for assistance. Mail id : wec@smvec.ac.in

Grievance Redressal Cell

There is a Grievance Redressal Cell under the Chairmanship of the Director of the institution. Students are requested to approach the Chairman / members to redress their grievances. Mail id : grievance@smvec.ac.in

Anti Ragging Cell

Ragging is strictly prohibited in the campus. Prevention of Sexual Harassment (POSH) cell has been constituted for the benefit of students to report against ragging. Mail id : antiragging@smvec.ac.in

Importance of CAT-I/CAT-II/Model Examination

Continuous assessment marks are awarded for the performance in the CAT-I, CAT-II & Model Exam, Hence all the students are requested to prepare well for each test / examination to earn the maximum continuous assessment marks.

Undertaking Minor / Major Projects

Each student is advised to take atleast one minor project. Involving in the project will be helping to understand the basics of the subject. Some of the minor / major project will also be benefiting the society. Moreover, the Management awards cash prizes for the best projects in each department.

Participation in the Curricular / Co-curricular / Extra curricular Activities

All the students are encouraged to participate in the curricular / co-curricular / extra curricular activities. Involvement in these activities will improve their knowledge level in the subject. If a student or a team gets cash prize / award in the technical event organized by the recognised institutions, then the management of this institution will also sanction an amount equivalent to the winning award / cash prize as a token of appreciation.

Leave Account Record

For each student, leave account record has been provided. The students are instructed to show the leave record to their parents and strictly adhere to the instructions given for availing the leave. The leave account record should be maintained properly and prior approval must be obtained for availing the leave. In exceptional cases, the students are permitted to get the approval after availing the leave.

Transport Facility

61 buses have been arranged for the students to reach the college from Puducherry, Kanagachettikulam, Thiruchitrabalam X Road, Villupuram, Neyveli, Panruti, Vadalur, Kurunchipadi, Cuddalore, Nellikuppam, Madukarai, Tindivanam, Ulundurpet, Thirukoilur, Chidambaram, Tiruvannamalai and Virudhachalam covering almost all the areas. Separate transport facility has been arranged for the students who remain in the college after 5 p.m. for utilising computer lab, library and sports facilities. The students are requested to utilise the transport facility.

Tutor Ward System

In the tutor ward system, 30 students are allotted to a tutor who will be taking care of these students in all academic and personal well being. The students are requested to utilize the resourceful faculty effectively.

All the students are requested to avoid mobile phones and travel by two wheelers considering their safety and security.

Placement and Training Division

The placement cell functions round the clock throughout the year to establish contact with reputed multinational companies, well established industrial organizations and plays an important role in locating various job opportunities and placing large number of students every year at these organizations.

Activities of the Training Division

- ☆ Arranges trainings for personality and interpersonal skill development
- ☆ Assists the students to get in-plant training
- ☆ Arranges industrial visits
- ☆ Creates awareness on the opportunities open for higher studies
- ☆ Arranges coaching classes for GATE, GRE, TOEFL, IELTS, IAS, IES etc.

Placement Record

Academic Year	Students Placed
2013-14	85%
2014-15	95%
2015-16	95%
2016-17	93%
2017-18	95%
2018-19	95%
2019-20	95%
2020-21	96%
2021-22	95%
2022-23	484*

* till October 2022

Details of Placed Students : 2021-22

MST Rebar Ser	18	Microchip	3
Econstruction Design and Build Pvt. Ltd.	8	TCS - Digital KAAR	10 22
VL and Engg.		Virtusa	17
Construction Pvt. Ltd	11	EmbedUR	1
TCS - NINJA	134	NTT Datea	4
CTS - GENC	232	Excelacom	3
WIPRO	159	Support Studio Tech.	5
Mu Sigma	43	Secure Kloud	10
ZOHO	13	CETAS	4
HARMAN	4	Tech Mahendra	10
CTS GENC-ELEVATE	16	FORBES MARSHALL	2
MINDTREE	27	RK POWER GEN Pvt.	2
CAPGEMINI	16	RAMPAL Pvt. Ltd	2
HCL Technology	5	Adroit Soft	33
INFOSYS	14	Shiash	8
EATON	4	Unisys	11
MY MEDICAL SHOP	3	CSS Corp	3
VOLTECH	16	Other	152
Appasamy Associates	2	Total	1027

Library Working Hours

8.30 a.m. to 8.30 p.m. (On all the working days)

8.30 a.m. to 10.00 p.m. (During the examination days)