# Student's Handbook

# **Genesis**

- Dr. M. Mohan Babu, Padma Shri awardee, a renowned movie artiste, producer and formerly a Member of Parliament (RajyaSabha), established Sree Vidyanikethan Engineering College in the year 1996 under Sree Vidyanikethan Educational Trust.
- The institution has twin objectives of providing quality Technical education and values in the backward region of Rayalaseema.
- Visionary and committed management, competent Teaching fraternity, and enthusiastic students have carved a niche for the College in the field of Technical Education and has laid a roadmap in achieving excellence.

### **Vision**

To be one of the Nation's premier Engineering Colleges by achieving the highest order of excellence in teaching and research.

## **Mission**

Through multidimensional excellence, we value intellectual curiosity, pursuit of knowledge building and dissemination, academic freedom and integrity to enable the students to realize their potential.

We promote technical mastery of Progressive Technologies, understanding their ramifications in the future society and nurture the next generation of skilled professionals to compete in an increasingly complex world, which requires practical and critical understanding of all aspects.

## **Core Values**

Excellence : Commitment to continuous improvement and innovation in Teaching, Learning, research and extension

Ethics : Pledge to honesty, integrity, mutual respect, transparency and accountability

> **Diversity** : Respect to all aspects of diversity

> **Student First**: Student centric planning and development

Collaboration: Stakeholder partnership for holistic institutional development & synergistic growth

# **Quality Policy**

Sree Vidyanikethan Engineering College strives to establish system of quality а assurance continuously address, monitor and evaluate the quality of education offered to students, thus promoting effective teaching processes for the benefit of students and making the College a Centre of Excellence for Engineering and Technological studies.

# **Objectives**

- Develop a campus which promotes higher learning and research
- Recruit and retain a diverse faculty of outstanding teacher-scholars with principles and discipline
- Promote industry institute interactions
- Expose students to leading Industries and Corporate Houses
- Foster a harmonious, cordial and tripartite relationship among the Management, faculty and students for their respective growth and for establishing a congenial academic environment in the College

# **Programmes Offered (2020-21)**

# **Diploma Programs: Polytechnic**

S.No.	Name of the Course	Year of starting	Annual Intake
1.	Diploma in Electrical and Electronics Engineering (DEEE)	2009	120
2.	Diploma in Electronics & Communication Engineering (DECE)	2009	60
3.	Diploma in Computer Engineering (DCME)	2009	60
4.	Diploma in Mechanical Engineering (DME)	2011	120
5.	Diploma in Civil Engineering (DCE)	2011	120

# **Undergraduate Programs: Bachelor of Technology**

S.No.	Name of the Course	Year of starting	Annual Intake
1.	B.Tech - Computer Science and Engineering	1996	240
2.	B.Tech - Electronics and Communication Engineering	1996	240
3.	B.Tech - Electrical and Electronics Engineering	1996	210
4.	B.Tech - Information Technology	1997	120
5.	B.Tech - Electronics and Instrumentation Engineering	1997	60
6.	B.Tech - Computer Science and Systems Engineering	1999	120
7.	B.Tech - Civil Engineering	2009	120
8.	B.Tech - Mechanical Engineering	2011	180
9.	B.Tech - Computer Science & Engineering (Artificial Intelligence)	2020	60
10.	B.Tech - Computer Science and Engineering (Data Science)	2020	60
11.	B.Tech - Computer Science and Business Systems	2020	60

# Postgraduate Programs: Master of Technology/MCA

S.No.	Program	Name of the Course	Year of starting	Annual Intake
1.	M.Tech	Computer Science	2004	36
2.	M.Tech	Electrical Power Systems	2004	18
3.	M.Tech	VLSI	2009	24
4.	M.Tech	Power Electronics and Drives	2017	18
5.	MCA	Master of Computer Applications	1998	60

# **Doctoral Programs**

S.No.	Name of the Research Program Year of				
1.	Electronics and Communication Engineering	2013			
2.	Electrical and Electronics Engineering	2013			
3.	Computer Science and Engineering	2016			

# **Significant Features**

#### **Milestones**

- Conferment of Autonomy in 2010-11 and extension till 2021-22 by UGC, New Delhi
- NAAC accreditation Grade 'A' since 2013 and Re-Accreditated upto 2024
- Permanent Affiliation accorded by JNTUA upto 2023
- > "UGC-Colleges with Potential for Excellence" status under CPE Scheme by UGC, New Delhi
- NIRF-2019: Rank of 167 (AIR). Ranked as Top Private Engineering College in Andhra Pradesh.
- Included under 2(f) (2008) and 12 (B) (2010) by UGC
- > 'A' Grade by Department of Higher Education, Andhra Pradesh
- Accreditation of B.Tech & M.Tech Programs by National Board of Accreditation (NBA)
- 'PLATINUM' Category in AICTE-CII Survey since 2017
- > TEQIP-II :Implemented World bank 6 crore project and one of the Best performing institutions at the National Level
- > ISTE Best Chapter Award for Andhra Pradesh Section 2019
- AICTE Sponsored Scheme Margdarshan sanctioned an amount of Rs.23 Lakhs

#### **Research and Entrepreneurship:**

- ➤ DST FIST: Rs. 20 lakhs for promotion of Research
- > National MEMS Design Centre: NPMASS and IISc, Bangalore
- > Atmospheric Research Laboratory: DST, GoI Project of Rs. 20 lakhs
- A grant of Rs. 261.99 lakhs from DST, UGC, INUP, ISRO, DBT towards Research activities
- > JNTUA recognized Research Centers: EEE, ECE & CSE Departments
- SRM Institute of Science & Technology (Deemed to be University) –
   3 Departments (EEE, ECE & CSE) Recognized Research Centres
- KL Education Foundation (Deemed to be University) Guideship for teachers
- Entrepreneurship Development Cell : AICTE grant of Rs. 8 lakhs (ED
   Cell Scheme)
- > Dr. M. Mohan Babu start-up fund of Rs.2.00 Crore was allocated for student idea incubation
- Technology Entrepreneurship Program (TEP) in collaboration with Indian School of Business (ISB), Hyderabad
- ➤ Listed in top 20 Institutions supporting startups at national level in AICTE Startup Summit 2017
- Recognized as one of the Best performing Institution Innovation Council (IIC) from South Central Zone by MHRD's Innovation Council
- Recognized as a Host Institute by Ministry of MSME

#### **Collaborations**

- IBM:Established IBM Center of Excellence
- Infosys:Campus Connect Program
- Confederation of Indian Industry (CII) for enhanced Industry Interaction
- Andhra Pradesh State Skill Development Corporation (APSSDC) for enhancing employability skills
- NASSCOM New Delhi for skill development in the areas of Business Analytics and Cyber Security
- CISCO Networking Academy
- Knowledge Incubation for Technical Education (KITE) Centre, IIT,
   Hyderabad for faculty & students development programs (FDP/SDP)
- The Indus Entrepreneurs (TiE) Amaravathi Chapter to foster entrepreneurship
- > 41 MoUs with Premier Institutions and reputed Industries
- Foreign Universities/Organizations:

**MoUs Signed:** (1) Universiti Tenaga Nasional, Malaysia;

(2) Northern Illinois University, Dekalb, Illinois, USA,

(3) IFFEN, Paris

MoUs in offing: (1) Queen's University Belfast (QUB), U.K;

(2) University of Illinois, Chicago, U.S.A;

(3) Asian Institute of Technology, Bangkok, Thailand

Spoken Tutorial Project (STP), NMEICT, IIT Bombay for certification courses: 2500 Students certified SWAYAM NPTEL Local Chapter, IIT Madras for MOOCs: Rated 'A' based on Certifications and recognized as one of the top 100 Active Local Chapter at National Level

#### **Skill Development**

- Established SIEMENS T-SDIs; CMs Skill Excellence Centre; and Dassault Systems 3-D Experience Center; and Applied Robotics Control Lab for Student Skill Development
- AICTE sanctioned and established Skill and Personality Development Programme Centre (SPDPC) for SC/ST Students with a grant of Rs. 15.3 lakh
- AICTE sanctioned an amount of Rs.31.37 lakh to implement Pradhan Mantri Kaushal Vikas Yojana for Technical Institutions (PMKVY-TI) scheme, offering engineering skills training to unemployed youth
- > IIT Madras has recognized the College as 'Best College Partner' for Quality Enhancement of Engineering Education (QEEE) 'Direct-to-Student Programme
- Collaborative Venture of APSCHE and British Council APHEECS
   Project to develop Employability Skills

#### **Other Significant Features**

- Vibrant Training and Placement Activities enabled with a placement record of 1401 students in various Multinational Companies
- ➤ 105 Prathibha awards to students for their outstanding academic achievement (2015-19)
- > Accreditation by TCS & Wipro Technologies for campus placements
- Participation in Grand Challenges Scholars Program National Academy of Engineers, USA
- Collaboration with Purdue University for IUCEE-EPICS Program from 2017
- Identified as National Cyber Defense Resource Centre by NCSS and organized Indian Cyber Congress
- Zonal Lead Partnership for Artificial Intelligence and Deep Learning; Skilling and Research Initiative in association with Bennett University, Greater Noida; Royal Academy of Engineering, London; Brunel University, London; and nVIDIA
- The Week Magazine (Hansa Research Survey) :
- > Ranked 64 among Private Engineering Colleges all over India
- Education World Magazine: Ranked 71 by "Education World Magazine" among Private Engineering Institutes.
- Careers 360 Magazine: Rated "AAA+" by "Careers 360", a popular English magazine.

#### SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to J.N.T. University Anantapur, Ananthapuramu)

# ACADEMIC REGULATIONS (SVEC-19) CHOICE BASED CREDIT SYSTEM

B.Tech. Regular Four Year Degree Program
(For the batches admitted from the academic year 2019–20)

ጼ

B.Tech. (Lateral Entry Scheme)
(For the batches admitted from the academic year 2020-21)

For pursuing four year undergraduate Degree Program B.Tech offered by Sree Vidyanikethan Engineering College under Autonomous status and herein after referred to as SVEC:

- **1. Applicability:** All the rules specified herein, approved by the Academic Council, shall be in force and applicable to students admitted from the academic year 2019-2020 onwards. Any reference to "College" in these rules and regulations stands for SVEC.
- **2. Extent:** All the rules and regulations, specified hereinafter shall be read as a whole for the purpose of interpretation and as and when a doubt arises, the interpretation of the Chairman, Academic Council is final. It shall be ratified by the Academic Council in the forthcoming meeting. As per the requirements of statutory bodies, Principal, Sree Vidyanikethan Engineering College shall be the Chairman, Academic Council.

#### 3. Admission:

- 3.1. Admission into First Year of Four Year B.Tech. Degree Program in Engineering:
- **3.1.1. Eligibility:** A candidate seeking admission into the First Year of four year B.Tech. Degree Program should have:

Passed either Intermediate Public Examination (I.P.E.) conducted by the Board of Intermediate Education, Andhra Pradesh, with Mathematics, Physics and Chemistry as optional courses (or any equivalent examination recognized by JNTUA, Ananthapuramu) for admission as per the guidelines of Andhra Pradesh State Council of Higher Education (APSCHE).

- **3.1.2. Admission Procedure:** Admissions shall be made into the first year of four year B.Tech. Degree Program as per the stipulations of APSCHE, Government of Andhra Pradesh:
  - (a) By the Convener, EAMCET, (for Category-A Seats).
  - (b) By the Management (for Category-B Seats).
  - (c) By the Management (for 15% Supernumerary Quota) for Persons of Indian
    Origin (PIO)/Foreign Nationals (FN)/ Children of Indian Workers in Gulf
    Countries/ Overseas Citizen of India (OCI)
- 3.2. Admission into the Second Year of Four year B.Tech Degree Program in Engineering (Lateral Entry).
- **3.2.1. Eligibility:** A candidate seeking admission into the Second Year of four year B.Tech. Degree Program (Lateral Entry) should have:
  - (i) Passed Diploma in Engineering in the relevant branch conducted by the Board of Technical Education, Andhra Pradesh (or equivalent Diploma recognized by JNTUA, Ananthapuramu).
  - (ii) Candidates qualified in ECET and admitted by the Convener, ECET. In all such cases for admission, when needed, permissions from the statutory bodies are to be obtained.
- **3.2.2. Admission Procedure:** 10% of the sanctioned strength in each Program of study as lateral entry students or as stipulated by APSCHE shall be filled in by the Convener, ECET.
- 4. Programs of study offered leading to the award of B.Tech. Degree:

Following are the four year undergraduate Degree Programs of study offered in various branches in SVEC leading to the award of B.Tech (Bachelor of Technology) Degree:

- 1) B.Tech (Civil Engineering)
- 2) B.Tech (Computer Science & Engineering)
- 3) B.Tech (Computer Science & Systems Engineering)
- 4) B.Tech (Electrical & Electronics Engineering)
- 5) B.Tech (Electronics & Communication Engineering)
- 6) B.Tech (Electronics & Instrumentation Engineering)
- 7) B.Tech (Information Technology)
- 8) B.Tech (Mechanical Engineering)

#### 5. Duration of the Program:

- leading to the Degree of Bachelor of Technology (B.Tech) of the JNTUA, Ananthapuramu. The four academic years shall be divided into eight semesters with two semesters per year. Each semester shall normally consist of 21 weeks (Minimum of 90 working days) having Continuous Internal Evaluation (CIE) and Semester End Examination (SEE), Choice Based Credit System (CBCS) and Credit Based Semester System(CBSS) as suggested by UGC and Curriculum/ Course Structure as suggested by AICTE are followed. Provision is made for lateral entry admission of students into the Second Year of the program in all the branches of study and they shall be required to satisfy the conditions of admissions thereto prescribed by the JNTUA, Ananthapuramu and Government of Andhra Pradesh.
- **5.2 Maximum Duration:** The student shall complete all the passing requirements of the B.Tech degree program within a maximum duration of 8 years (6 years for lateral entry), these durations reckoned from the commencement of the semester to which the student was first admitted to the program.

#### **6.** Structure of the Program:

Each Program of study shall consist of:

- (i) HS (Humanities and Social Sciences) Courses
- (ii) BS (Basic Sciences) Courses
- (iii) ES (Engineering Sciences) Courses
- (iv) PC (Professional Core) Courses
- (v) PE (Professional Electives)
- (vi) OE (Open Electives) Courses
- (vii) Mandatory Courses (MC)
- (viii) Audit Courses (AC)
- (ix) Projects (PR) (Socially Relevant Projects, Internship, Project Work)

S.No	Course Category	Course Type	No. of Credits
1.	HS – Humanities and Social Sciences	Humanities, Social Sciences and Management.	11
2.	BS – Basic Sciences	Mathematics, Physics and Chemistry Courses, etc.	22
3.	ES – Engineering Sciences	Fundamental Engineering courses.	22-23
4.	PC – Professional Core	Core courses related to the Parent Discipline/ Branch of Engg.	60-61
5.	PE – Professional Electives	Elective courses related to the Parent Discipline/ Branch of Engg.	15
6.	OE – Open Electives	Electives from other technical and /or emerging subjects	15
7.	PR - Projects	Socially Relevant Projects, Internship, Project Work	14
8.	MC - Mandatory Courses	Induction Program, Environmental Science, Constitution of India, Indian Traditional Knowledge	-
9.	AC - Audit Courses	Skill Development / Value Added Courses.	-

#### **Contact Periods:**

The contact periods per week are assigned depending on the complexity and volume of the course.

#### 7. Credit Courses:

All Courses are to be registered by a student in a Semester to earn Credits. Credits shall be assigned to each Course in a L: T: P: C (Lecture Hours: Tutorial Hours: Practical Hours: Credits) Structure, based on the following general pattern.

- Theory Courses: One Lecture Hour (L) per week in a semester: 01 Credit
- Practical Courses: One Practical Hour (P) Per week in a semester: 0.5 Credit
- Tutorial: One Tutorial Hour (T) Per week in a semester: 01 Credit
- Mandatory Courses: No CREDIT is awarded.
- Audit Courses: No CREDIT is awarded.
- **Open Elective** (MOOC): 03 Credits

Student activities like NCC, NSS, Sports, Study Tour and Guest Lecture etc. shall not carry ANY Credits.

For Socially Relevant Projects, Internship and Project Work where formal contact periods are not specified, credits are assigned based on the complexity of the work to be carried out.

The four year curriculum of any B. Tech Program of study shall have a total of **160** credits. However the curriculum for students admitted under lateral entry shall have a total of **118** credits.

#### 8. Choice Based Credit System (CBCS):

Choice Based Credit System (CBCS) is introduced in line with UGC guidelines in order to promote:

- Student centred learning
- Students to learn courses of their choice
- Interdisciplinary learning

A Student has a choice of registering for courses comprising program core, professional electives, open electives, MOOC courses, value added / Skill based courses. Besides, choice is also offered to students for registering courses to earn Minor in Engineering/Honors degree.

#### 9. Course Enrollment and Registration

- **9.1** Each student, on admission shall be assigned to a Faculty Advisor (Mentor) who shall advice and counsel the student about the details of the academic program and the choice of courses considering the student's academic background and career objectives.
- 9.2 Each student on admission shall register for all the courses prescribed in the curriculum in the student's first and second Semesters of study. The student shall enroll for the courses with the help of the student's Faculty Advisor (Mentor). The enrollment for the courses from II B.Tech I Semester to IV B.Tech I Semester shall commence 10 days prior to the last instructional day of the preceding semester for registration process. If the student wishes, the student may drop or add courses (vide clause 8) 10 days prior to commencement of the concerned semester and complete the registration process duly authorized by the Chairman, Board of Studies of concerned department.
- **9.3** If any student fails to register the courses in a semester, he shall undergo the courses as per the program structure.

- **9.4** After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the Semester-end Examinations.
- **9.5** Elective courses shall be offered by a Department only if a minimum of 40 students register for that course.

#### 10. OPEN ELECTIVE (MOOC)

OPEN ELECTIVE (MOOC) is an online course aimed at unlimited participation and open access via the web.

- **10.1** A Student is offered an Open Elective (MOOC), in the IV B.Tech I-Semester, and is pursued through Massive Open Online Course (MOOC) platforms. The duration of the MOOC courses shall be for a minimum period of 08 weeks.
- **10.2** The student shall confirm registration by enrolling the course within 10 days prior to the last instructional day of the III B.Tech II-Semester along with other courses.
- **10.3** The list of courses along with MOOC service providers shall be identified by the Chairman, BOS, and Head of the Department. The identified Open Elective (MOOC) courses are to be approved by the Chairman, Academic Council.
- 10.4 The HOD shall appoint one faculty member as mentor (One mentor for each course for with a minimum of 40 students and maximum of 60 students) during the III B.Tech II-Semester for each Open Elective Course registered through MOOC.
- 10.5 There shall be ONLY semester-end examination for open elective (MOOC) course. It shall be evaluated by the department through ONLINE with 50 multiple choice questions for 100 marks. The department shall prepare the Question Bank for Conducting the ONLINE Open Elective (MOOC) Examination.

#### 11. BREAK OF STUDY FROM A PROGRAM (Gap Year)

- **11.1** A student is permitted to go on break of study for a maximum period of two years either as two breaks of one year each or a single break of two years.
- 11.2 In case, a student wishes to extend the gap year for one more consecutive year, he shall be permitted with the prior approval of the Principal on the recommendations of the Head of the Department prior to the beginning of the semester in which he has taken break of study.
- 11.3 The student shall apply for break of study in advance, in any case, not later than the last date of the first assessment period in a semester. The gap year concept is introduced for start-up (or) incubation of an idea, National/International Internships, and professional Volunteering. The application downloaded from the

website and duly filled in by the student shall be submitted to the Principal through the Head of the department. A committee shall be appointed by the Principal in this regard. Based on the recommendations of the committee, Principal shall decide whether to permit the student to avail the gap year or not.

**11.4** The students permitted to rejoin the program after break of study shall be governed by the Curriculum and Regulations in force at the time of rejoining.

The students rejoining in new regulations shall apply to the Principal in the prescribed format through Head of the Department, at the beginning of the readmitted semester for registering additional/equivalent courses to comply with the curriculum in-force.

- 11.5 The two years period of break of study shall not be counted for the maximum Period of graduation (i.e the maximum period of graduation is 10 years for Regular admitted students and 8 years for Lateral Entry admitted students availing Gap Year).
- **11.6** If a student has not reported to the college after completion of the approved period of break of study he is deemed to be detained in that semester. Such students are eligible for readmission into the semester when offered next.

#### 12. Examination System:

**12.1** All components in any Program of study shall be evaluated through internal evaluation and / or an external evaluation conducted as Semester-end examination.

SI. No.	Course	Marks	Examination and Evaluation	Scheme of examination
1.	Theory	60	Semester-end examination of 3 hours duration (External evaluation)	The examination question paper in theory courses shall be for a maximum of 60 marks. The question paper shall be of descriptive type with 10 questions each of 12 marks, taken two from each unit. Each unit shall have internal choice and 5 questions shall be answered, one from each unit.
		Theory 40		Two mid-term examinations each for 40 marks are to be conducted. For a total of 40 marks, 80% of better one of the two and 20% of the other one are added and finalized.  Mid-I: After first spell of instruction (I & II Units).
			Mid-term Examination of 2 hours duration (Internal evaluation).	Mid-II: After second spell of instruction (III, IV & V Units).
		(Internal evaluation).		

SI. No.	Course	Marks	Examination and Evaluation		Scheme of examination
		50	Examina duration	er-end Lab ation for 3 hours al evaluation)	The examination shall be conducted by the faculty member handling the laboratory (Examiner-2) and another faculty member (Examiner-1) appointed by the Chief Controller of Examinations.
2	Laboratory		30	Day-to-Day evaluation for Performance in laboratory experiments and Record.	Two laboratory examinations, which includes Day-to-Day evaluation and Practical test, each for 50 marks are to be evaluated by the faculty members handling the laboratory. For a total of 50 marks 80% of better one of the two and 20% of the other one are added and finalized.
		50		(Internal evaluation).	<b>Laboratory examination-I:</b> Shall be conducted just before FIRST mid-term examinations.
			20	Practical test (Internal evaluation).	<b>Laboratory examination-II:</b> Shall be conducted just before SECOND mid-term examinations.
3	Internship	100	Semester-end Examination		The evaluation shall be done by the Department Evaluation Committee ( <b>DEC</b> ) at the end of the semester as given in 12.2.1.
4	Open Elective (MOOC)	100	Semester-end Examination		The evaluation shall be done by the department through ONLINE with 50 multiple choice questions.
_	Socially	100	50	Internal Evaluation	Shall be evaluated as given in 12.2.2(i)
5	Relevant Project	100	50	Semester-end evaluation	Viva-Voce examination shall be conducted at the end of the semester as given in 12.2.2(ii)
6	Mandatory courses	40	Internal Evaluation		Shall be evaluated as given in 12.2.4
7	Audit Courses	-	-		As detailed in 12.2.5
8	Project	200	100	Internal evaluation	Continuous evaluation shall be done by the Project Evaluation Committee ( <b>PEC</b> ) as given in 12.2.3.
0	Work	200	100	Semester-end evaluation	Project Work Viva-Voce Examination shall be conducted by a Committee at the end of the semester as given in 12.2.3.

# 12.2 Internship/Socially Relevant Project/Project Work/Mandatory Course/ Audit Course Evaluation:

#### 12.2.1 Internship:

The student shall undergo **Internship** in an Industry/National Laboratories/ Academic Institutions relevant to the respective branch of study. This course is to be registered during III B.Tech II-Semester and taken up during the summer

vacation after completion of the III B.Tech II-Semester, for a period of FOUR weeks duration. The Industry Training/Internship shall be submitted in a Report form, and a presentation of the same shall be made before a Department Evaluation Committee (DEC) and it should be evaluated for 100 marks. The DEC shall consist of the Head of the Department, the concerned Supervisor and a Senior Faculty Member of the Department. The DEC is constituted by the Chief Controller of Examinations on the recommendations of the Head of the Department. There shall be no internal marks for Internship. The Internship shall be evaluated at the end of the IV B.Tech I-Semester.

#### 12.2.2 Socially Relevant Project:

A project for community services shall be carried out in teams (maximum 5 students per team) to solve real life problems of society. The Students shall visit the society (Villages/Hospitals/social service organizations etc,.) to identify the problem, conduct literature survey and provide a feasible solution. Each team shall work under the supervision of a guide (faculty member).

- (i) <u>Internal Evaluation:</u> Two internal evaluations (First evaluation before the I-Mid-term examinations and second evaluation before the II-Mid-term examinations) shall be conducted by the guide and a faculty member nominated by the HOD. For a total of 50 marks, 80% of better one of the two and 20% of the other one are added and finalized.
- (ii) <u>Semester-end Evaluation:</u> A report on socially relevant project shall be submitted by the team of students to the department at the end of the semester. The Viva-Voce examination shall be conducted by the concerned guide and a senior faculty member recommended by the Head of the Department and appointed by the Chief Controller of Examinations.

#### 12.2.3 Project Work:

(i) <u>Internal Evaluation:</u> The Internal Evaluation shall be made by the Project Evaluation Committee (PEC) consisting of concerned supervisor and two senior faculty members, on the basis of TWO project reviews on the topic of the project. Each review shall be conducted for a maximum of "100" marks. For a total of 100 marks, 80% of better one of the two and 20% of the other one are added and finalized. The PEC is constituted by the Principal on the recommendations of the Head of the Department.

(ii) <u>Semester-end Evaluation:</u> The Semester-end Project Work Viva-Voce Examination shall be conducted by a Committee consisting of External examiner (nominated by the Chief Controller of Examinations), HOD and concerned Supervisor. The evaluation of project work shall be done at the end of the IV B.Tech II Semester.

Three copies of the dissertation certified in the prescribed format by the concerned Supervisor and HOD shall be submitted to the Department. One copy is to be submitted to the Chief Controller of Examinations. The examiner shall be nominated by the Chief Controller of the Examinations from the panel of SIX examiners submitted by the Department.

#### 12.2.4 Mandatory Courses:

Mandatory courses carry "ZERO" credits. There shall be NO Semester-end examination. However, ATTENDANCE in Mandatory courses shall be considered while calculating aggregate attendance in a semester. The internal examination shall be conducted and evaluated similar to the THEORY courses. The student shall be declared to have passed the mandatory courses only when HE secures 40% marks in the internal examination. If the student FAILS, a reexamination shall be conducted for FAILED candidates in the CONSEQUETIVE semester. The performance of the student shall be indicated in the grade sheets "SATISFACTORY" (or) "NOT SATISFACTORY" as given in 17.1. The student should pass all the mandatory courses, for the award of B.Tech degree.

#### 12.2.5 Audit Courses:

Audit courses carry "ZERO" credits. There shall be **NO Internal** and **Semester-end examination**. However, ATTENDANCE in Audit courses shall be considered while calculating aggregate attendance in a semester. The student should study all the audit courses, and it shall be indicated in the GRADE Sheet.

#### 12.3. Eligibility to appear for the Semester-End Examination (SEE):

- **12.3.1** A student shall be eligible to appear for semester-end examinations if he acquires a minimum of 75% of attendance in aggregate of all the courses in a semester.
- **12.3.2** Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.

- **12.3.3** Shortage of Attendance below 65% in aggregate **shall in no case be condoned.**
- **12.3.4** Students whose shortage of attendance is not condoned in any semester are not eligible to take their semester-end examinations of that class and their registration shall stand cancelled.
- 12.3.5 A student shall not be promoted to the next semester unless he satisfies the attendance requirements of the current semester, as applicable. The student may seek readmission for the semester when offered next. He shall not be allowed to register for the courses of the semester while he is in detention. A student detained due to shortage of attendance, shall have to repeat that semester when offered next.
- **12.3.6** A stipulated fee shall be payable to the College towards Condonation of shortage of attendance.
- **12.3.7** The attendance in **Student Development Activities** shall be considered for finalization of aggregate attendance.
- **12.3.8** For the calculation of a student attendance in any semester, the total number of classes conducted shall be counted as scheduled in the class-work time table.

#### 12.4. Evaluation:

Following procedure governs the evaluation.

- **12.4.1.** Marks for components evaluated internally by the faculty shall be submitted to the Controller of Examinations one week before the commencement of the Semester-end examinations. The marks for the internal evaluation components shall be added to the external evaluation marks secured in the Semester-end examinations, to arrive at the total marks for any course in that semester.
- **12.4.2.** Performance in all the courses is tabulated course-wise and shall be scrutinized by the Results Committee and moderation is applied if needed and course-wise marks are finalized. Total marks obtained in each course are converted into letter grades.
- **12.4.3.** Student-wise tabulation shall be done and individual grade Sheet shall be generated and issued to the student.

#### 12.5. Personal verification / Revaluation / Recounting:

Students shall be permitted for personal verification/request for recounting/ revaluation of the Semester-end examination answer scripts within a stipulated period after payment of prescribed fee. After recounting or revaluation, records are updated with changes if any and the student shall be issued a revised grade sheet. If there are no changes, the student shall be intimated the same through a notice.

#### 12.6. Supplementary Examination:

In addition to the regular semester-end examinations conducted, the College may also schedule and conduct supplementary examinations for all the courses of other semesters when feasible for the benefit of students. Such of the candidates writing supplementary examinations may have to write more than one examination per day.

# 13. Academic Requirements for promotion/ completion of regular B.Tech Program of study:

The following academic requirements have to be satisfied in addition to the attendance requirements for promotion/completion of regular B.Tech Program of study.

#### For students admitted into B.Tech. (Regular) Program:

- 13.1 A student shall be deemed to have satisfied the minimum academic requirements for each theory course, laboratory course, socially relevant project and project work, if he secures not less than 40% of marks in the Semester-end examination and a minimum of 40% of marks in the sum total of the internal evaluation and Semester-end examination taken together. For the courses "Internship" and "Open Elective (MOOC)",he should secure not less than 40% of marks in the semester-end examination.
- 13.2 A student shall be promoted from second year to third year of Program of study only if he fulfills the academic requirement of securing 40% of credits (rounded off to lower integer number) from the following examinations (Irrespective of whether or not the candidate appears for the semester-end examinations as per the normal course of study):
  - a. **One** regular and **two** supplementary examinations of I B.Tech I Semester.
  - b. **One** regular and **one** supplementary examinations of I B.Tech II Semester.
  - c. **One** regular examination of II B.Tech I Semester.

- 13.3 A student shall be promoted from third year to fourth year of Program of study only if he fulfills the academic requirements of securing 40% of credits (rounded off to lower integer number) from the following examinations (Irrespective of whether or not the candidate appears for the semester-end examinations as per the normal course of study):
  - a. One regular and four supplementary examinations of I B.Tech I Semester.
  - b. One regular and three supplementary examinations of I B.Tech II Semester.
  - c. **One** regular and **two** supplementary examinations of II B.Tech I Semester.
  - d. **One** regular and **one** supplementary examinations of II B.Tech II Semester.
  - e. One regular examination of III B.Tech I Semester.
  - \* In case of getting detained for want of credits by sections 13.2 and 13.3 above, the student may make up the credits through supplementary examinations.
- **13.4** A student shall register for all the 160 credits and earn all the 160 credits. Marks obtained in all the 160 credits shall be considered for the calculation of the DIVISION based on CGPA.
- **13.5** A student who fails to earn 160 credits as indicated in the course structure within eight academic years from the year of their admission shall forfeit his seat in B.Tech. Program and his admission stands cancelled.

# For Lateral Entry Students (batches admitted from the academic year 2020-2021):

- 13.6 A student shall be deemed to have satisfied the minimum academic requirements for each theory, practical course, Socially relevant project and Project Work, if he secures not less than 40% of marks in the semester-end examination and a minimum of 40% of marks in the sum total of the internal evaluation and semester-end examination taken together. For the courses "Internship" and "Open Elective (MOOC)", he shall be declared to have passed if he secures minimum of 40% of marks in the semester-end examination.
- **13.7** A student shall be promoted from third year to fourth year only if he fulfills the academic requirements of securing 40% of credits (rounded off to lower integer number) from the following examinations:
  - a. **One** regular and **Two** supplementary examinations of II B.Tech I Semester.
  - b. **One** regular and **One** supplementary examinations of II B.Tech II Semester.
  - c. **One** regular examination of III B.Tech I Semester.

Irrespective of whether or not the candidate appears for the semester-end examination as per the normal course of study and in case of getting detained for want of credits the student may make up the credits through supplementary examinations.

- **13.8** A student shall register for all 118 credits and earn all the 118 credits. Marks obtained in all the 118 credits shall be considered for the calculation of the DIVISION based on CGPA.
- **13.9** A student who fails to earn 118 credits as indicated in the course structure within six academic years from the year of their admission shall forfeit his seat in B.Tech Program and his admission stands cancelled.

#### 14. Minor degree in a discipline:

The concept of Minor degree is introduced in the curriculum of all B. Tech. programs offering a Major degree. The main objective of Minor degree in a discipline is to provide additional learning opportunities for academically motivated students and it is an optional feature of the B.Tech Program. In order to earn a Minor degree in a discipline, a student has to earn 20 extra credits (By studying SIX theory and TWO laboratory courses) from the core courses of the minor discipline.

- a. Students having a CGPA of 8.0 or above up to II B.Tech I-Semester without any backlogs shall be permitted to register for Minor degree.
- b. An SGPA and CGPA of 7.5 has to be maintained in the subsequent semesters without any backlog subjects in order to keep the Minor discipline registration live or else it shall be cancelled.
- c. Students aspiring for a Minor degree must register from III B.Tech I-Semester onwards and must opt for a **Minor in a discipline other than the discipline** he is registered in.
- d. A Student shall register for a maximum of **SEVEN** credits in a semester starting from III B.Tech I-Semester to IV B.Tech I-Semester (Either **TWO** theory and **ONE** laboratory course (or) **TWO** theory courses).
- e. The Evaluation pattern of the courses shall be similar to the regular program courses evaluation.
- f. Minimum strength required for offering a **Minor in a** discipline is considered as 20% of the class size and Maximum should be 80% of the class size.
- g. Minor degree program should be completed by the end of IV B. Tech II-Semester along with the Major discipline.
- h. A student registered for Minor degree shall pass in all subjects that constitute the requirement for the Minor degree program. No class/division (i.e., second class, first class and distinction, etc.) shall be awarded for Minor degree program.

- i. The Minor degree shall be mentioned in the degree certificate as Bachelor of Technology in XXX with Minor in YYY. For example, Bachelor of Technology in Computer Science & Engineering with Minor in Electronics & Communication Engineering. This shall also be reflected in the transcripts, along with the list of courses taken for Minor degree program with CGPA mentioned separately.
- j. Separate course/class work and time table shall be arranged for the various Minor degree programs. Attendance regulations for these Minor discipline programs shall be as per regular courses.

**NOTE:** Interested meritorious students shall be permitted to register either for Minor degree in a discipline (or) Honours Degree in a discipline only, **but not both.** 

#### 15. Honours degree in a discipline:

- a. Students having a CGPA of 8.0 and above up to II B.Tech I-Semester without any backlogs shall be permitted to register for Degree with Honours.
- b. The concept of **Honours degree** is introduced in the curriculum for all B. Tech. programs. The main objective of Honours degree in a discipline is to provide additional learning opportunities for academically motivated students and it is an optional feature of the B. Tech. program. In order to earn Honours degree in a discipline, a student has to earn 20 extra credits by studying FIVE advanced courses for 15 credits (by choosing not more than TWO courses in a semester staring from III B.Tech. I Semester) and by carrying out a **mini project** for 5 credits in the concerned branch of Engineering. The Evaluation pattern of theory courses shall be similar to the regular program courses evaluation. Students aspiring for Honours degree must register from III B.Tech I-Semester semester onwards. Students may register for mini project from III B.Tech II-Semester onwards and complete the same by the end of IV B. Tech I-Semester.

#### c. Procedure for Conduct and Evaluation of Honours degree Mini project:

Out of a total of 100 marks for the **Mini project**, 50 marks shall be for Internal Evaluation and 50 marks for the Semester-end Examination (Viva-voce). The Internal Evaluation shall be made by the Project Evaluation Committee (**PEC**) consisting of concerned supervisor and two senior faculty members, on the basis of TWO project reviews on the topic of the mini project. Each review shall be conducted for a maximum of "50" marks. The final internal marks shall be taken as the SUM of marks obtained in the two reviews. The **PEC** is constituted by the Principal on the recommendations of the Head of the Department. The Semesterend examination (Viva-Voce) shall be conducted by a Committee consisting of External examiner (nominated by the Chief Controller of Examinations), HOD and concerned Supervisor. The evaluation of mini project work shall be done at the end of the IV B.Tech I- Semester.

**NOTE:** Interested meritorious students shall be permitted to register either for Minor degree in a discipline (or) Honours Degree in a discipline only, **but not both.** 

#### 16. Transitory Regulations:

Students who got detained for want of attendance (or) who have not fulfilled academic requirements (or) who have failed after having undergone the Program in earlier regulations (or) who have discontinued and wish to continue the Program are eligible for admission into the unfinished semester from the date of commencement of class work with the same (or) equivalent courses as and when courses are offered and they shall be in the academic regulations into which they are presently readmitted.

A regular student has to satisfy all the eligibility requirements within the maximum stipulated period of eight years and a lateral entry student within six years for the award of B.Tech Degree.

# 17. Grades, Semester Grade Point Average and Cumulative Grade Point Average:

**17.1. Grade System:** After all the components and sub-components of any course (including laboratory courses) are evaluated, the final total marks obtained shall be converted into letter grades on a "10 point scale" as described below.

**Grades Conversion and Grade points Attached** 

% of Marks obtained	Grade	Description of Grade	Grade Points (GP)	
> = 95	0	Outstanding	10	
> = 85 to < 95	S	Superior	9	
> = 75 to < 85	Α	Excellent	8	
> = 65 to < 75	В	Very Good	7	
> = 55 to < 65	С	Good	6	
> = 45 to < 55	D	Fair	5	
> = 40 to < 45	Е	Pass	4	
< 40	F	Fail	0	
Not Appeared	N	Absent	0	
	For Mandatory Courses			
>=40	Р	Satisfactory	-	
<40	I	Not Satisfactory	-	

#### **Pass Marks:**

A student shall be declared to have passed theory course, laboratory course, Socially relevant project and project work if he secures minimum of 40% marks in external examination, and a minimum of 40% marks in the sum total of internal evaluation and external examination taken together. For Industrial training/internship he shall be declared to have passed if he secures minimum of 40% of marks in the semester-end examination. Otherwise, he shall be awarded fail grade - 'F' in such a course irrespective of internal marks. 'F' is considered as a fail grade indicating that the student has to pass the Semester-End Examination in that course in future and obtain a grade other than 'F' and 'N' for passing the course.

For the Mandatory Courses, if the student obtained 40% or more marks, then his performance shall be indicated as "P" (SATISFACTORY), otherwise the performance shall be indicated as "I" (NOT SATISFACTORY) in the grade sheet.

**17.2. Semester Grade Point Average (SGPA):** SGPA shall be calculated as given below on a "10 point scale" as an index of the student's performance:

$$SGPA = \frac{\sum (C \ X \ GP)}{\sum C}$$

Where "C" denotes the "credits" assigned to the courses undertaken in that semester and "GP" denotes the "grade points" earned by the student in the respective courses.

**Note:** SGPA is calculated only for the candidates who appeared in the semesterend regular examinations in a particular semester:

#### 17.3. Cumulative Grade Point Average (CGPA):

The CGPA shall be calculated for a candidate appeared in the Semester-end examinations for all the courses (including Regular & Supplementary) till that semester. The CGPA shall be displayed in the Grade sheet of the Regular Semester-end examinations and also in the consolidated Grade Sheet issued at the end of the program. The CGPA is computed on a 10 point scale as given below:

$$CGPA = \frac{\sum (C \ X \ GP)}{\sum C}$$

where C denotes the credits assigned to courses undertaken up to the end of the Program and GP denotes the grade points earned by the student in the respective courses.

- **18. Grade Sheet:** A grade sheet (Marks Memorandum) shall be issued to each student on his performance in all the courses registered in that semester indicating the **SGPA and CGPA.**
- **19. Consolidated Grade Sheet:** After successful completion of the entire Program of study, a Consolidated Grade Sheet indicating performance of all academic years shall be issued as a final record. Duplicate Consolidated Grade Sheet shall also be issued, if required, after payment of requisite fee.
- 20. Award of Degree: The Degree shall be conferred and awarded by Jawaharlal Nehru Technological University Anantapur, Ananthapuramu on the recommendations of the Chairman, Academic Council, SVEC (Autonomous).
- **20.1. Eligibility:** A student shall be eligible for the award of B.Tech Degree if he fulfills all the following conditions:
  - Registered and successfully completed all the components prescribed in the Program of study to which he is admitted.
  - Successfully acquired the minimum required credits as specified in the curriculum corresponding to the branch of study within the stipulated time.
  - Obtained CGPA greater than or equal to 4.0 (Minimum requirement for declaring as passed).
  - Has NO DUES to the College, Hostel, Library etc. and to any other amenities provided by the College.
  - No disciplinary action is pending against him.

#### 20.2. Award of Division: Declaration of Division is based on CGPA.

#### **Awarding of Division**

CGPA	Division
> = 7.0	First Class with Distinction
> = 6.0 and < 7.0	First Class
> = 5.0 and < 6.0	Second Class
> = 4.0 and < 5.0	Pass Class

#### 21. Additional Academic Regulations:

- **21.1** A student may appear for any number of supplementary examinations within the stipulated time to fulfill regulatory requirements for award of the degree.
- **21.2** In case of malpractice/improper conduct during the examinations, guidelines shall be followed as given in the ANNEXURE-I.
- **21.3** When a student is absent for any examination (Mid-term or Semester-end) he shall be awarded zero marks in that component (course) and grading shall be done accordingly.
- **21.4** When a component is cancelled as a penalty, he shall be awarded zero marks in that component.

#### 22. Withholding of Results:

If the candidate has not paid dues to the College/University (or) if any case of indiscipline is pending against him, the result of the candidate shall be withheld and he shall not be allowed/promoted to the next higher semester.

#### 23. Amendments to Regulations:

The Academic Council of SVEC (Autonomous) reserves the right to revise, amend, or change the Regulations, Scheme of Examinations, and / or Syllabi or any other policy relevant to the needs of the society or industrial requirements etc., with the recommendations of the concerned Board(s) of Studies.

#### 24. General:

The words such as "he", "him", "his" and "himself" shall be understood to include all students irrespective of gender connotation.

**Note:** Failure to read and understand the regulations is not an excuse.

#### **ANNEXURE-I**

#### GUIDELINES FOR DISCIPLINARY ACTION FOR MALPRACTICES/ IMPROPER CONDUCT IN EXAMINATIONS

Rule No.	Nature of Malpractices/ Improper conduct	Punishment
NO.	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the course of the examination)	Expulsion from the examination hall and cancellation of the performance in that course only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that course only of all the candidates involved. In case of an outsider, he shall be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester.  The Hall Ticket of the candidate is to be cancelled.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred for four consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the courses of the examination (including labs and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that semester. The candidate is also debarred for four consecutive semesters from class work and all Semester-end examinations, if his involvement is established. Otherwise, The candidate is debarred for two consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he shall be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester. The candidate is also debarred for two consecutive semesters from class work and all

Rule No.	Nature of Malpractices/ Improper conduct	Punishment
		Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that course only.
6.	Refuses to obey the orders of the Chief Controller of Examinations/Controller of Examinations/Invigilator/ any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the Controller of Examinations or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the Controller of Examinations, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that semester. If the candidate physically assaults the invigilator/Controller of the Examinations, then the candidate is also debarred and forfeits his/her seat. In case of outsiders, they shall be handed over to the police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester. The candidate is also debarred for two consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester. The candidate is also debarred and forfeits the seat.

**Note:** Whenever the performance of a student is cancelled in any course(s) due to Malpractice, he has to register for Semester-end Examinations in that course(s) consequently and has to fulfill all the norms required for the award of Degree.