1. **Evidences for QlM metric 1.1.1:**

   "Curricula developed /adopted have relevance to the local/ national/ regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution"

2. **Evidences for QlM metric 1.3.1:**

   "Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum"

3. **Evidences for QnM metric 1.1.2:**

   "Percentage of Programs where syllabus revision was carried out during the last five years"

1. **Evidences for QlM metric 1.1.1**

   (i) **Evidence for need assessment to study relevance to local/ national/ regional/ global developmental needs extracted from "Feedback from stakeholders for curriculum update"**

   (ii) **Evidence for Vision, Mission, Program Outcomes, Program Specific Outcomes, and Course Outcomes extracted from "Syllabus Books" of 2016 regulations.**

   (iii) **Sample evidence for "Knowledge areas and courses planned as per APS and industry"**

   (iv) **Academic Council Minutes of meeting of approval of syllabus of 2014 and 2016 regulations**

   (v) **List of broad classification of courses based on local, regional, national and global needs with sample courses indicated on a typical course structure of 2016 regulations.**

(i) Evidence for need assessment to study relevance to local/ national/ regional/ global developmental needs extracted from "Feedback from stakeholders for curriculum update"

Extracts of Feedback Reports and Action Taken Reports

SVEC14 Regulations Introduced in the AY 2014-15

B. Tech. in Electronics and Communication Engineering

Feedback report from Alumni:

Feedback was taken from 2010-11and 2011-12 passed out batch during the academic years 2012-13 and 2013-14. About 40% of them responded to our survey in each year. Their feedback is summarized as follows:

1. To meet the industrial requirements, advanced knowledge in latest technologies has to be gained through the introduction of new courses in digital domain.
2. Experiments on Design concepts have to be included in the laboratories.
3. In order to work efficiently in industries,courses like Control systems and Network Analysishave to be strengthened.
4. To sustain in competitive job market today, graduates should have entrepreneurial skills. So, a course on Entrepreneurship can be introduced in the curriculum.
5. To focus on employability in banking sector as it is growing rapidly, courses on Banking and Insurance, Cost Accounting and Financial Management can be introduced as open electives in the curriculum.

Action taken report:

1. New courses like Analog IC Design and Mixed IC Design in digital domain were included to fulfill the industrial needs.
2. In almost all the Laboratories, Design concepts were included to improve the standards.
3. Topics like Mechanical and Electrical Systems, AC Servo Motor, Integral and Derivative Controllers, Difficulties in formation of rough table, Applications of R-H Criterion, Relative Stability Analysis and Compensation Techniques were included in control systems. Two Port Networks and Filters also were added in Network Analysis to strengthen the course.
4. Courses like Entrepreneurship for Micro, Small and Medium Enterprises, Banking and

   Insurance & Cost Accounting and Financial Management were included in the curriculum.

Feedback report from Students:

The students of 2012-13 and 2013-14 Passed out batch were asked to give feedback for the curriculum improvement. About 80% of them responded to our survey in each year. Their feedback is summarized as follows:

1. In competitive examinations point of view, chapters on Two Port Networks and Filters have to be included in Network Analysis.
2. In Electronic Measurements and Instrumentation, more importance can be given to measurements related to real-time applications.
3. Latest topics such as sensors, solar cells and measures to control pollution have to be introduced in physics or chemistry.

Action taken report:

1. Network analysis syllabus was strengthened. New courses were introduced to improve the standard of the program.
2. More number of real-time applications was included in Electronic Measurements and Instrumentation.
3. The latest topics like Electrochemical Sensors, Composites, Numerical problems on measurement of hardness of water, Phosphoric acid fuel cells, proton exchange membrane fuel cells, Solid oxide fuel cells, Fuel Technology, Green Chemistry and Green Engineering , Special theory of relativity , Black body radiation, Wein's law, Rayleigh-Jeans law, Planck's law and solar cell were included. in physics and chemistry.

Feedback report from Faculty members:

Feedback report was taken from all the Faculty members who taught the courses of the program during 2012-13 and 2013-14. The following suggestions were considered for improvement in curriculum.

1. Course Contents in subjects like DICA and VLSI Design should be logically arranged.
2. Due to strong demand in Electronic industry especially in digital domain, new courses

   in VLSI have to be introduced.
3. Open Electives have to be introduced

Action taken report:

1. In few subjects, Course title and syllabi were better correlated and the contents were

   Reorganized logically. The standard of some of the courses is further improved.

2. New courses in digital domain like Analog IC Design, Mixed IC Design, Digital CMOS Design were introduced.

3. Open electives were introduced.

SVEC14 Regulations Introduced in the AY 2014-15

M. Tech. in VLSI

Feedback report from Alumni:

Feedback was taken from 2010-11 Passed out batch during the academic year 2012-13. About 40% of them responded to our survey. Their feedback is summarized as follows:

1. To meet the industrial requirements, advanced knowledge in latest technologies has to be gained through the introduction of new courses.
2. Experiments on front-end and back-end design have to be included in Mixed Signal Laboratory.
3. Course on Physical Design Automation, Co-Design and Analog IC Design has to beStrengthened by introducing concepts related to analysis and design.

Action taken report:

1. New courses like Computational Techniques in Microelectronics, Device Modeling, Low Voltage Analog Circuit Design, ULSI Technology, IC Fabrication and RF IC Design were included to fulfill the industrial needs.
2. Experiments on front-end and back-end design were included in Mixed Signal Laboratory.
3. More relevant algorithms and the design aspects were included in Physical Design Automation. Contents on COSYMA and LYCOS co-design systems were elaborated. Topics on stability and noise analysis were included in Analog IC Design.

Feedback report from Students:

The students of 2012-13 Passed out batch were asked to give feedback for the curriculum improvement. The following were the suggestions given by 80% of them:

1. More applications on FIR and IIR digital filters can be dealt in detail for FPGA based designs.
2. Suggested to include experiments on Analog IC design.
3. To enhance the analytical skills of the students a course on Computational Techniques in Microelectronics can be included in the curriculum.
4. To focus on employability and emphasize fabrication issues, a course on fabrication can be included.

Action taken report:

1. The course on FPGA Applications was strengthened .More number of applications were included.
2. Experiments on Analog IC design were added in Analog and Digital IC Design Lab.
3. A course titled Computational Techniques in Microelectronics was included in the curriculum.
4. Two new courses on fabrication titled IC Fabrication and ULSI Technology were included in the curriculum.

Feedback report from Faculty members:

Feedback report was taken from all the Faculty members who taught the courses of the program during the academic year 2012-13. The following suggestions were considered for improvement in curriculum.

1 A new course in the curriculum can be included to enhance the research skills of the students. Self-study content with emphasis on advanced and research topics has to be included in almost all the courses.

2 A new course has to be introduced to gain in-depth knowledge in fabrication process pertaining to ICs and fabrication issues in ULSI technology.

3 Courses on Digital signal processing and wireless sensor networks can be introduced in the curriculum to emphasize signal processing techniques in VLSI design in order to work in areas like wireless communications, Digital signal and Image processing.

4 Redundancy has to be removed in Testing and Testability. Also the syllabus should be reorganized logically.

Action taken report:

1. A course on Research Methodology was included to enhance research skills of the students. Self-study concepts were included in all the lesson plans.
2. Courses on FPGA Applications and ULSI Technology were introduced in the curriculum to help the students to get adapted to the latest technology.
3. New courses like Advanced Digital Signal Processing, DSP Processors and Wireless Sensor Networks were introduced to build research environment.
4. Syllabus in Testing and Testability was compressed and logically reorganized.

SVEC16 Regulations Introduced in the AY 2016-17

B. Tech. in Computer Science and Engineering

Feedback report from Alumni:

Feedback was taken from 2012-2013 and 2013-2014 passed out students during the academic year 2014-2015 and 2015-2016 respectively. About 43% of the Alumni responded to the request. The summary of the feedback is as follows:

- Practical knowledge on network concepts is essential
- Real time experience in cloud computing environment enhances employability
- Courses like IOT, VANET and green technologies can be introduced
- Course which helps in enhancing personality development of students was essential to improve employability
- Courses to meet the present industrial requirement was needed
- Courses which help in preparing for Civil Services can be introduced
- Foreign languages can be introduced which may help students when they go abroad
- Course which help to improve entrepreneur skills of students was essential
- Ethical hacking subject can be introduced
- Course which help in performing better in interviews was required
- Subject based on image processing may be introduced

Action taken report:

The following actions were taken to improve the curriculum:

- Lab course for network subject was introduced to enable students to do practice sessions on network concepts.
- Cloud Computing lab was introduced with tools like IBM Bluemix Cloud, Amazon WebService, MS-Azure.
- IOT was introduced as professional elective and green technologies as open elective
- Personality Development course was introduced as open elective
- Courses like IOT, Green technologies, Nanoscience and Technology were introduced

- Courses such as Indian Constitution, Indian Economy, Indian History, Indian Heritage and Culture were introduced as open electives
- Foreign languages such as French and German languages were introduced to help students who had plan to go to foreign countries.
- Business Communication and Career Skills course was introduced
- Ethical hacking subject was introduced
- Soft skills lab course was introduced
- Computer Vision course was introduced

Feedback report from Students:

Feedback was taken from the students who were passing out during the academic years, 2014-2015 and 2015-16. About 81% of the Students responded to the request. The summary of the feedback is as follows:

- Any other programming language courses can be introduced to enhance the programming skills of the students
- Course which helps to model the problem identified and to simulate it was needed
- Many students suggested to include new courses which help in enhance the knowledge and meet the industry requirements.
- Practical sessions in computer networks, cloud computing, big data enhance the knowledge of the students
- More courses can be introduced in diversified fields
- Courses which enhance programming skills can be introduced
- Hands-on on cloud computing technology will help students to learn the concepts practically

Action taken report:

Based on feedback received from the students, the following actions were taken:

- Python and Java programming courses and corresponding lab courses were introduced
- Modelling and Simulation Course was introduced
- Courses like Python and Java Programming were introduced as core courses, data communications, optimization techniques, Internet of Things were introduced as

professional electives, green technologies, Nanoscience and Technology were introduced as open electives.

- Cloud computing, Big data and Computer Networks lab were introduced
- Courses like Philosophy of Education, Public Administration, Building Maintenance and Repair were introduced
- Principles of programming languages was introduced to improve programming skills in students
- Cloud Computing lab was introduced

Feedback report from Faculty members:

Feedback was taken from all the faculty members who taught the courses of the program during the academic years 2014-2015 and 2015-16. The suggestions are summarized below:

- Concepts like virtual memory can be removed as it will be discussed in operating system and addressing modes can be added in computer organization course
- B-Tree Index Files could be included in the Database Management Systems course
- Finding the maxima and minima from unit -2, NP-hard and NP-complete problems can be eliminated from design and analysis of algorithms
- Object oriented programming can be taught using a specific language
- Topics such as online analytical processing, concepts related to cluster analysis like grid based method, data mining trends can be added in data warehousing and data mining subject
- Revision of Mobile Computing course, theory of computation course was needed
- Operating system and Unix programming course can be isolated
- Number of Case studies in object oriented analysis and design can be increased/enhanced
- Composite transformations in 3-d geometric topic can be removed from computer graphics course because of complexity
- Allocation of frames can be removed and Signals, Forks, i-node, File Descriptors can be added in operating systems

- Process automation, LifecycleExpectations, Pragmatic Software Metrics Automation, concepts related to tailoring the process topic can be removed and agile management can be added
- Concepts based on interpreters and processing various statements can be added in compiler design course
- Lab for computer networks can be introduced
- Wireless networks course can be introduced

Action taken report:

Based on feedback received from the faculty, the following actions were taken:

- Instruction formats, addressing modes were added as they are essential topics and floating-point arithmetic operations was removed because of complexity, Serial communication, Introductionto Peripheral Component Interconnect (PCI) bus, virtual memory was deletedfrom Computer organization subject
- B-Tree Index Files was included in the Database Management Systems course
- Finding the maxima and minima from unit -2, NP-hard and NP-complete problems were eliminated from Design and Analysis of Algorithms Course
- Object oriented programming is replaced with Object oriented programming using C++
- Online analytical processing, concepts related to cluster analysis like grid based method, data mining trends were added in data warehousing and data mining course
- Novel applications, Limitations, Introduction to 3G and 4G Communications Standards: WCDMA, LTE, WiMAX, concepts related to wireless LAN, Caching invalidation
  mechanisms, context aware computing, MANET and WAP were added and GPRS, concepts related to mobile synchronization and mobile devices were removed in mobile computing
- The equivalence of DFA and NDFA, Conversion of epsilon-NFA to NFA and DFA, Mealy and Moore models, Identity rules, Pumping lemma, Chomsky hierarchy of languages, the model of linearbounded automaton for regular languages, Applications of the pumping lemma, undecidability were removed from Theory of Computation course

- Operating system and Unix Internalsweremade as isolated courses. Linux programming was introduced in place of Unix Internals. Operating system lab course was revised and Linux programming lab was introduced
- Case Studies on Online student course registration system for university, Hospital Management

  were included in object oriented analysis and design course
- Composite transformations in 3-d geometric topic was removed from computer graphics course
- Allocation of frames were removed and Signals, Forks, i-node, File Descriptors were added in operating systems course
- Process automation, LifecycleExpectations, Pragmatic Software Metrics Automation, concepts related to tailoring the process topic were removed and agile management was added
- Interpretation- Interpreters, Recursive, interpreters, Iterative interpreters, Preprocessing the intermediate code,Preprocessing ofexpressions, Preprocessing of if-statements and 'goto'statements, Preprocessing of routines were added in compiler design course
- Networks Lab was introduced to have hands-on experience for students
- Wireless networks course was introduced

SVEC16 Regulations Introduced in the AY 2016-17

M. Tech. in Computer Science

Feedback report from Alumni:

Feedback was taken from 2011-2012 and 2012-2013 passed out students during the academic year 2013-2014 and 2014-2015 respectively. About 42% of the Alumni responded to the request. The summary of the feedback is as follows:

- Lab for data mining was required
- Courses like big data can be made as core subjects and more electives can be introduced
- Course like computer vision might provide students with various opportunities
- Practical experience on cloud computing and Big data analytics will help students a lot
- IOT and its corresponding lab can be introduced
- labs can be provided for the courses like networks and data mining.

Action taken report:

Based on the feedback received, the following actions were taken:

- Database Management Systems & Data Warehousing and Data Mining Lab was introduced
- Cloud Computing and Big Data Analytics were made as core courses and Computer Vision and IOT were introduced as elective course by removing Advanced Software Engineering course.
- Computer Vision was introduced as an elective course
- Cloud computing and Big Data Analytics lab was introduced
- IOT was introduced as theory and also as an elective course only.
- Data Structures and AdvancedDatabase ManagementSystems Laboratorywas replaced with Database Management Systems & Data Warehousing and Data Mining Lab AndData Structures & Computer Networks Lab

Feedback report from Students:

Feedback was taken from the students who were passing out during the academic year, 2013-2014 and 2014-15. About 83% of the Students responded to the request. The summary of the feedback is as follows:

- Courses based on recent trends would be helpful
- Lab could be introduced for computer networks course
- Hands-on experience on cloud computing would be encouraging students to work in the corresponding field
- Computer vision, IoTand Cyber Physical Systems course can be introduced
- Revision of big data analytics can be done by including some recent technologies like Hadoop
- Elective subjects like cloud computing can be made as core such that diversified courses can be introduced as elective
- Practical Sessions on Big Data Analytics can be introduced

Action taken report:

Based on the feedback received, the following actions were taken:

- IoT was introduced as an elective course as there is a lot of scope for students to develop societal applications
- Data Structures and Computer Networks Lab was introduced
- Cloud Computing and Big Data Analytics lab was introduced such that practical experience can be provided for the students
- Computer Vision course was introduced
- The syllabus of Big Data Analytics is revised by including concepts related to Hadoop, Map-reduce.
- Cloud Computing course was made as a core course
- Big Data Analytics lab was introduced in integrated with cloud computing

Feedback report from Faculty members:

Feedback was taken from all the faculty members of the program. The following were the suggestions made:

- Database System Environment, Centralized and Client/server Architectures for DBMS can be included in Advanced Database Management Systems
- Revision of cluster analysis concepts need to be done in Data Warehousing Data Mining Course
- Bigdata Analytics need to be revised to include latest technologies

- The design of memory hierarchies can be removed and The Evolution of Dataflowcomputers, Computer Architecture of Warehouse–Scale Computers can be added in advanced computer architecture
- Heaps and travelling salesman problem for dynamic programming can be included in data structures and algorithms

Action taken report:

Based on the feedback received, the following actions were taken:

- Link Virtualization, Concepts related to Internet protocol, VPNs, Tunneling and Overlay Networkswere removed.Application Layer-Principles of Network Applications, the Web and HTTP, File Transfer: FTP, Electronic Mail in the Internet, Domain Name System (DNS), Cellular networks were included in Advanced Computer Networks course
- Database System Environment, Centralized and Client/server Architectures for DBMS were included and Concepts related to distributed data bases were revised in Advanced Database Management Systems
- Cluster Analysis concepts were revised to include more in-depth concepts in Data Warehousing and Data Mining Course
- Latest technologies like Hadoop, Map-reduce were included and the complete syllabus of Big Data Analytics was revised
- The design of memory hierarchies, PRAM and VLSI models, Graphics processing units, Computer Architecture of Warehouse – Scale Computers were removed and The Evolution of Dataflow computers, Computer Architecture of Warehouse–Scale Computers are added in Advanced Computer Architecture.
- Heaps and travelling salesman problem for dynamic programming were included in data structures and algorithms course

SVEC16 Regulations Introduced in the AY 2016-17

Master of Computer Applications

Feedback report from Alumni:

Feedback was taken from 2011-12, 2012-13 and 2013-14 passed out batches during the academic years 2013-14, 2014-15 and 2015-16 respectively. About 40% of them were responded in each year to our survey. Their feedback was summarized as follows:

1. Suggested to introduce industry related courses such as Internet of Things, Cyber Security, Computer Forensics & Mobile Application Development.
2. Courses like programming through C & LINUX have to be strengthened.
3. Encourage students towards self learning courses in emerging fields of Computer Science.

Action taken report:

1. Courses like Internet of Things, cyber security, computer forensics and Mobile Application Development were introduced to meet the industrial requirements.
2. Topics like application of structure with pointers and recursion were included in Programming through C, LINUX commands, shell scripting were added in IT lab to strength the course.
3. Emerging courses like Ethical Hacking, Bioinformatics and Massive Open Online Courses were offered for students to encourage online & blended learning.

Feedback report from Students:

Students exit batch feedback was taken from 2013-14, 2014-15 and 2015-16 passed out batches of its respective academic years. About 80% of them were responded to survey. Their feedback is summarized as follows:

1. Suggested to include Data Structures as a separate laboratory and real world applications for Web Programming and Big Data Analytics laboratories.
2. Requested to refine the syllabus in Object Oriented Programming through JAVA, Programming through C, IT workshop & Management laboratory.
3. Requested to offer Cloud Computing, Big Data Analytics laboratories to acquire indepth knowledge on the respective courses.
4. Include AWT & SWINGS in application through Java, open source tools and case studies for skill development.

Action taken report:

1. Introduced courses on Data Structure laboratory, Big Data Analytics lab, Cloud Computing lab in SVEC16 curriculum.

2. Refined syllabus in Object Oriented Programming through java, IT workshop & Management laboratory & fundamentals of computer in Programming through C courses.

3. Included open source tools like R, HADOOP, MS-Azure in Big Data Analytics lab and Cloud Computing Lab, AWT, SWINGS in Object Oriented Programming through Java lab courses in the curriculum to meet the needs of industry.

Feedback report from Faculty members:

Faculty feedback was taken from all faculties who taught the courses of the program during the Academic years 2013-14, 2014-15 and 2015-16. All of them have responded and following are few valuable suggestions:

1. Suggested to introduce LINUX laboratory and measures of efficiency & analysis of algorithms in Programming through C course.

2. Latest trends of Information Technology like Bioinformatics and Ethical Hacking courses have to be included.

3. Adopt self-learning topics in each courses enhance the capabilities of students.

4. Recommended to include Mini project in V semester instead of IV semester.

5. Suggested to include topics for improving information transfer, and reading comprehensions among students in the course English Language lab.

6. Suggested to include topics on Gaps in Training, Training Process, and Impediments in Effective training in the course Organizational Behavior and Human Resource Management.

7. Suggested to include a course on "Soft Skills Lab."

Action taken report:

1. Industry oriented courses were introduced on emerging fields of computer science like LINUX laboratory and measuring of efficiency & analysis algorithms in Programming through C.

2. Courses like Bioinformatics and Ethical hacking were included which are emerging in the field of Information Technology.

3. Included self-learning topics in each course of SVEC16 regulations.

4. Mini Project was included in V semester as advanced programming languages were covered in IV and V semesters.

5. Topics for improving information transfer, and reading comprehensions among students in the course English Language lab were included.

6. Topics on Gaps in Training, Training Process, and Impediments in Effective training in the course Organizational Behavior and Human Resource Management" were included.

7. A new course on "Soft Skills Lab." Was included.

Feedback report from Employer:

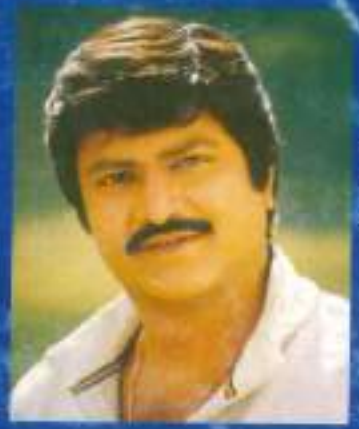
Employer feedback is taken centrally. The feedback on curriculum is taken from employers who recruited 2011-12, 2012-13 and 2013-14 passed out batches of our students in the academic years 2013-14, 2014-15 and 2015-16. Companies such as Tata Consultancy Services, Wipro Technologies, DST Worldwide Services have responded to our request. They suggested to include the following new courses.

1. Big data analytics lab
2. Cloud computing lab
3. Enterprise resource planning
4. Internet of Things
5. Computer Forensics
6. Mobile Application Development
7. Bio-informatics
8. Cyber Security
9. Ethical Hacking

Action taken report:

As suggested by the employers, all the above new courses are included.

(ii) Evidence for Vision, Mission, Program Outcomes, Program Specific Outcomes, and Course Outcomes extracted from "Syllabus Books" of 2016 regulations



'If there's anything at all that a country like India truly deserves for its children, it is high Quality Educational Institutions that can shape a better Nation'.

Dr. M. Mohan Babu
Chairman.

ACADEMIC REGULATIONS COURSE STRUCTURE AND DETAILED SYLLABI

OF

ONICS AND COMMUNICATION ENGINEERING

FOR

REGULAR FOUR YEAR DEGREE COURSE

(for the batches admitted from 2016-2017)

&

r B.TECH LATERAL ENTRY PROGRAM

(for the batches admitted from 2017-2018)

OICE BASED CREDIT SYSTEM

REE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

(Affiliated to JNTU Anantapur, Approved by AICTE

VISION

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

MISSION

- To foster intellectual curiosity, pursuit and dissemination of knowledge.
- To explore students' potential through academic freedom and integrity.
- To promote technical mastery and nurture skilled professionals to face competition in ever increasing complex world.

QUALITY POLICY

Sree Vidyanikethan Engineering College strives to establish a system of Quality Assurance to 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.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

VISION

To be a center of excellence in Electronics and Communication Engineering through teaching and research producing high quality engineering professionals with values and ethics to meet local and global demands.

MISSION

- The Department of Electronics and Communication Engineering is established with the cause of creating competent professionals to work in multicultural and multidisciplinary environments.
- Imparting knowledge through contemporary curriculum and striving for development of students with diverse background.
- Inspiring students and faculty members for innovative research through constant interaction with research organizations and industry to meet societal needs.
- Developing skills for enhancing employability of students through comprehensive training process.
- Imbibing ethics and values in students for effective engineering practice.

PROGRAM EDUCATIONAL OBJECTIVES

After few years of completion of the Program, the graduates of B. Tech. (ECE) would have

1. Enrolled in completed higher education in the core or allied areas of electronics and communication engineering or management
2. Successful entrepreneurial or technical career in the core or allied areas of electronics and communication engineering.
3. Continued to learn and to adapt to the world of constantly evolving technologies in the core or allied areas of electronics and communication engineering.

PROGRAM OUTCOMES

On successful completion of the Program, the graduates of B. Tech. (ECE) will be able to:

1. Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems
2. Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. 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
4. 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.
5. 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
6. 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.
7. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development
8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. 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.
11. 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.
12. 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.

PROGRAM SPECIFIC OUTCOMES

On successful completion of the Program, the graduates of B. Tech. (ECE) will be able to:

1. Apply the knowledge of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems to the solutions of real world problems.
2. Analyze, Design and Develop solutions in real time in the domains of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems
3. Conduct investigations and address complex engineering problems in the domains of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems.
4. Apply appropriate techniques, resources, and modern tools to complex engineering systems and processes in the domains of Electronics, Signal Processing, Communications, and VLSI & Embedded Systems.

electric dipole, Quarter wave monopole and half wave dipole - Current distributions, Field components, Radiated power, Radiation resistance, Beam width, Directivity, Effective area and Effective height; Natural current distributions, far-fields and patterns of Thin linear center-fed antennas of different lengths, Illustrative problems.

UNIT-III: ANTENNA ARRAYS **(10 Periods)**

Point sources- Definition, Patterns, arrays of 2 isotropic sources different cases; Principle of pattern multiplication, Uniform linear arrays - Broadside arrays, End fire arrays, EFA with increased directivity, Derivation of their characteristics and comparison, BSA with non-uniform amplitude distribution - General considerations and Binomial arrays, Arrays with parasitic elements, Yagi-Uda arrays, Folded dipoles & their characteristics, Illustrative problems

UNIT-IV: VHF, UHF AND MICROWAVE ANTENNAS **(10 Periods)**

Helical Antennas - Helical geometry, Helix modes, Practical design considerations for monofilar helical antenna in axial and normal modes ,Horn antenna.Microstrip antennas - Introduction, Features, Advantages and Limitations; Rectangular patch antennas - Geometry and parameters, characteristics of microstrip antennas, Impact of different parameters on characteristics; Reflector antennas Introduction, Flat sheet and corner reflectors, Parasoloidal reflectors Geometry, Pattern characteristics, Feed methods, Reflector types, Illustrative problems.

UNIT-V: ANTENNA MEASUREMENTS **(06 Periods)**

Introduction, Concepts- Reciprocity, Near and far fields, Coordination system, Sources of errors, Pattern measurement arrangement, Measurement of Directivity, Gain(by comparison, Absolute and 3 Antenna Methods), Radiation pattern

Total Periods: 45

TEXT BOOKS:

1. John D. Kraus and Ronald J. Marhefka and Ahmad S.Khan, *Antennas and wave propagation*, 4th Edition (Special Indian Edition), TMH, New Delhi, 2010.
2. Samuel Y. Liao, *Microwave devices and circuits*, Pearson Education, 3rd Edition, 2003

REFERENCE BOOKS:

1. C.A. Balanis, *Antenna Theory*, 2nd Edition, John Wiley & Sons, 2001.
2. E.C. Jordan and K.G. Balmain, *Electromagnetic Waves and Radiating Systems*, 2nd Edition, PHI, 2000.

III B.Tech. - II semester

(16BT60402) DIGITAL SIGNAL PROCESSING

Int. Marks	Ext. Marks	Total Marks	L	T	P	C
30	70	100	3	1	-	3

PREREQUISITES: A course on Signals and Systems.

COURSE DESCRIPTION:

Continuous and discrete signals and sequences; systems; DFT and FFT algorithms for the analysis of discrete sequences; design and realization of Digital IIR and FIR filters; DSP processors and architectures.

COURSE OUTCOMES:

On successful completion of the course, students will be able to:

CO1. Apply the knowledge of fundamentals of
- Frequency analysis of signals and systems.
- DFT and FFT transforms.
- Analog & Digital Filter Design.
- Digital Filter Realization.
- DSP Processors.

CO2. Analyze numerical and analytical problems of discrete time signals and systems in frequency domain using Transforms.

CO3. Design and develop digital filters to optimize system performance and their realization.

CO4. Interpret and synthesize the response of Digital filters to validate their characteristics.

CO5. Apply appropriate techniques and algorithms to design digital signal processing systems with an understanding of limitations.

DETAILED SYLLABUS:

UNIT I – INTRODUCTION TO DIGITAL SIGNAL PROCESSING **(10 Periods)**

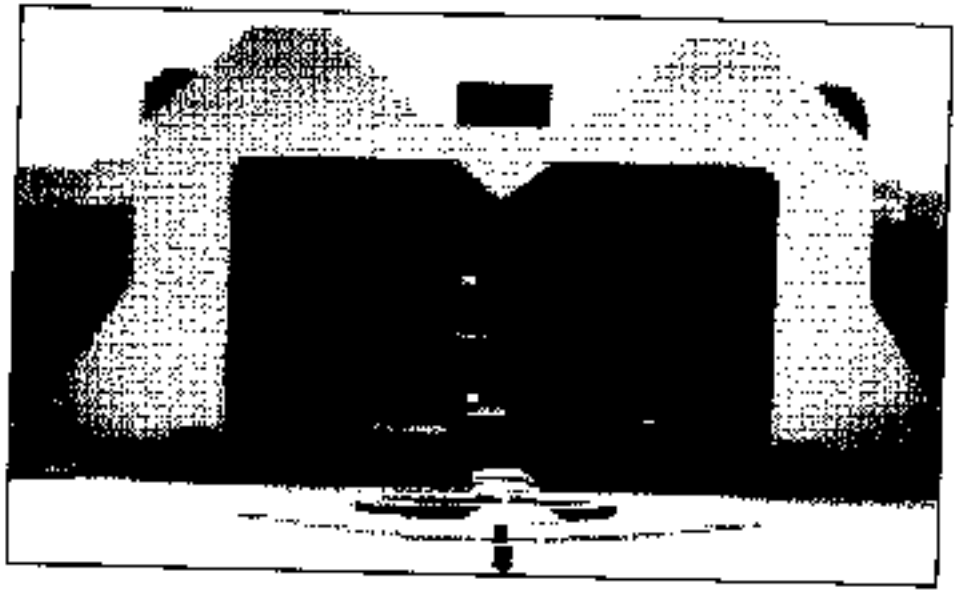
Discrete-time signals and systems, Linear shift invariant, Stability and Causality, Linear constant coefficient difference equations, Solution for difference equations using Z-transforms, Frequency analysis of signals - Fourier series and Fourier transform of Discrete time signals; Frequency domain representation of Discrete Time Systems.

'If there's anything at all that a country like India truly deserves for its children, it is high Quality Educational Institutions that can shape a better Nation'.

Dr. M. Mohan Babu
Chairman

ACADEMIC REGULATIONS
COURSE STRUCTURE
AND
DETAILED SYLLABI
For
MASTER OF TECHNOLOGY
IN
ELECTRICAL POWER SYSTEMS

(for the batches admitted from 2016-2017)



SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)

VISION

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

MISSION

- To foster intellectual curiosity, pursuit and dissemination of knowledge.
- To explore students' potential through academic freedom and integrity.
- To promote technical mastery and nurture skilled professionals to face competition in ever increasing complex world

QUALITY POLICY

Sree Vidyanikethan Engineering College strives to establish a system of Quality Assurance to 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.

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(Autonomous)

Sree Sainath Nagar, Tirupati - 517 102

Department of Electrical and Electronics Engineering

Vision

To become the Nation's premiere centre of excellence in electrical engineering through teaching, training, research and innovation to create competent engineering professionals with values and ethics

Mission

Department of Electrical Engineering strives to create human resources in Electrical Engineering to contribute to the nation development and improve the quality of life

Imparting Knowledge through implementing modern curriculum, academic flexibility and learner centric learning methods in Electrical Engineering

Inspiring students for aptitude to research and innovation by exposing them to industry and societal needs to creating solutions for contemporary problems

Honing technical and soft skills for enhanced learning outcomes and employability of students with diverse background through comprehensive training methodologies

Inculcate values and ethics among students for a holistic engineering professional practice.

Program Educational Objectives

With a few years of graduation, graduates will

1. Have enrolled in doctoral studies or engage in research activities of societal importance.
2. Assume key positions in research divisions, industry and academia.
3. Advance professionally through continuing education, ethics and values.

Program Outcomes

After Successful completion of the Programme, post graduates will be able to

1. Acquire in-depth knowledge of specific discipline or professional area, including wider and global perspective, with an ability to discriminate, evaluate, analyse and synthesize existing and new knowledge, and integration of the same for enhancement of knowledge. (**Scholarship of Knowledge**)
2. Analyze complex engineering problems critically, apply independent judgement for synthesizing information to make intellectual and/or creative advances for conducting research in a wider theoretical, practical and policy context. (**Critical Thinking**)
3. Think laterally and originally, conceptualise and solve engineering problems, evaluate a wide range of potential solutions for those problems and arrive at feasible, optimal solutions after considering public health and safety, cultural, societal and environmental factors in the core areas of expertise. (**Problem Solving**)
4. Extract information pertinent to unfamiliar problems through literature survey and experiments, apply appropriate research methodologies, techniques and tools, design, conduct experiments, analyse and interpret data, demonstrate higher order skill and view things in a broader perspective, contribute individually/in group(s) to the development of scientific/technological knowledge in one or more domains of engineering. (**Research Skill**)
5. Create, select, learn 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. (**Usage of modern tools**)
6. Possess knowledge and understanding of group dynamics, recognise opportunities and contribute positively to collaborative-multidisciplinary scientific research, demonstrate a capacity for self-management and teamwork, decision-making based on open-mindedness, objectivity and rational analysis in order to achieve common goals and further the learning of themselves as well as others. (**Collaborative and Multidisciplinary work**)
7. Demonstrate knowledge and understanding of engineering and management principles and apply the same to one's own work, as a member and leader in a team, manage projects efficiently in respective disciplines and multidisciplinary environments after consideration of economical and financial factors. (**Project Management and Finance**)

8. Communicate with the engineering community, and with society at large, regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by adhering to appropriate standards, make effective presentations, and give and receive clear instructions. (**Communication**)
9. Recognize the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously. (**Life-long Learning**)
10. Acquire professional and intellectual integrity, professional code of conduct, ethics of research and scholarship, consideration of the impact of research outcomes on professional practices and an understanding of responsibility to contribute to the community for sustainable development of society. (**Ethical Practices and Social Responsibility**)
11. Observe and examine critically the outcomes of one's actions and make corrective measures subsequently, and learn from mistakes without depending on external feedback. (**Independent and Reflective Learning**)

PROGRAM SPECIFIC OUTCOMES:

After Successful completion of the Programme, post graduates will

1. Demonstrate specialized knowledge in electrical power systems, its operation and control with an ability to combine existing and recent practices.
2. Analyze and solve complex problems to obtain optimal solution in power system operation and control to meet the needs of industry and society.
3. Demonstrate research competence in power system to design innovative products and provide services in the field of electrical power systems and related areas.
4. Apply modern tools, techniques and resources to provide solutions to complex engineering problems related to electrical power systems

Radio Interference (RI): Corona pulses - generation, properties and frequency spectrum. Limits for radio interference fields. Lateral profiles of RI and modes of propagation, excitation function, measurement of RI, RIV and excitation functions - numerical problems.

UNIT - IV: ELECTROSTATIC FIELDS (10 Periods)

Electrostatic field: calculation of electrostatic field of EHV lines, effect on humans, animals and plants - electrostatic induction in un-energized circuit of single circuit and double-circuit lines, meters and measurement of electrostatic fields - numerical problems.

UNIT - V: POWER-FREQUENCY VOLTAGE CONTROL AND OVERVOLTAGES (10 Periods)

No-load voltage conditions and charging currents, voltage control - synchronous condenser, shunt and series compensation, Static VAR compensation - Numerical problems.

Total Periods: 50

TEXT BOOK:

1. Rakosh Das Begamudre, *Extra High Voltage AC Transmission Engineering*, 3rd edition, New Age International Pvt. Ltd, 2006.

REFERENCE BOOKS:

1. S. Rao, *EHVAC, HVDC Transmission and Distribution Engineering*, 3rd edition, Khanna Publications, 2001.
2. General Electric Company (GEC), Project EHV, *EHV Transmission line reference Book*, Edison House, 1968.

M. Tech. I-Semester

[illegible]: MICROCONTROLLERS AND APPLICATIONS

(Professional Elective - I)

Int. Marks	Ext. Marks	Total Marks	L	T	P	C
40	60	100	4	--	--	4

PRE-REQUISITES: Digital logic design, Microprocessors and Microcontrollers at UG level.

COURSE DESCRIPTION:
8051 Microcontroller Architecture, Programming and Interfacing; PIC Microcontroller Architecture, features, programming and interfacing.

COURSE OUTCOMES: On successful completion of the course, students will be able to:

- CO1. demonstrate knowledge on architecture and salient features of 8051 and PIC microcontrollers.
- CO2. critically analyze a microcontroller and design suitable interface for interfacing and system operations.
- CO3. develop skills in evaluating stand-alone systems and develop programs for interfacing and coding.
- CO4. undertake research by identifying a suitable microcontroller for solving complex electrical engineering problems.
- CO5. use modern tools like PROTEUS, MPLAB, MATLAB, PIC C Compiler etc., for the design, analysis and implementation of the system.

DETAILED SYLLABUS:

UNIT - I: 8051 MICROCONTROLLER (12 Periods)

Overview of 8051 microcontrollers 8051/8052 - architecture and features. Memory - internal, external Program - Data memory and their interfacing. Data memory - Register Banks, Bit addressable space, scratch pad area, Special Function Registers (SFRs). Instruction set - Data transfer, Arithmetic, Logical, Branch control instructions. Addressing modes. Timers - Mode 0, 1, 2 and 3 operations, TMOD, TCON. Timer applications - Wave generation, Device control operations.

UNIT-II: 8051 INTERFACING (10 Periods)

Basics of serial communication - RS232, MAX232, Baud rate, Serial port programming - SCON, SMOD, SBUF, PCON. Interrupts - IE, TCON, IP. Applications using interrupts of 8051/8052 - Wave generation, Device control operations, interfacing - ADC, DAC, LCD, matrix keyboard and PWM.

UNIT-III: PIC MICROCONTROLLERS (11 Periods)

CISC vs RISC, Harvard Vs Von Neumann architectures, PIC 16F877A architecture and features. PIC16 Memory organization - program memory, data memory, PIC Register file - General purpose registers and SFRs.

Introduction to PIC Assembly Programming, PIC Data Format and Directives, PIC programming tools, Instruction set - data transfer, arithmetic, logical, bit manipulation, branch Instructions, I/O port Programming, Addressing modes - Immediate, Direct and Register indirect addressing Modes, Macros and Modules. PIC programming using MPLAB and PIC C Compiler.

'If there's anything at all that a country like India truly deserves for its children, it is high Quality Educational Institutions that can shape a better Nation'.

Dr. M. Mohan Babu
Chairman.

ACADEMIC REGULATIONS
COURSE STRUCTURE
AND
DETAILED SYLLABI

For

MASTER OF COMPUTER APPLICATIONS

REGULAR THREE YEAR DEGREE PROGRAM

(for the batches admitted from 2016 - 2017)

&

M.C.A. LATERAL ENTRY PROGRAM

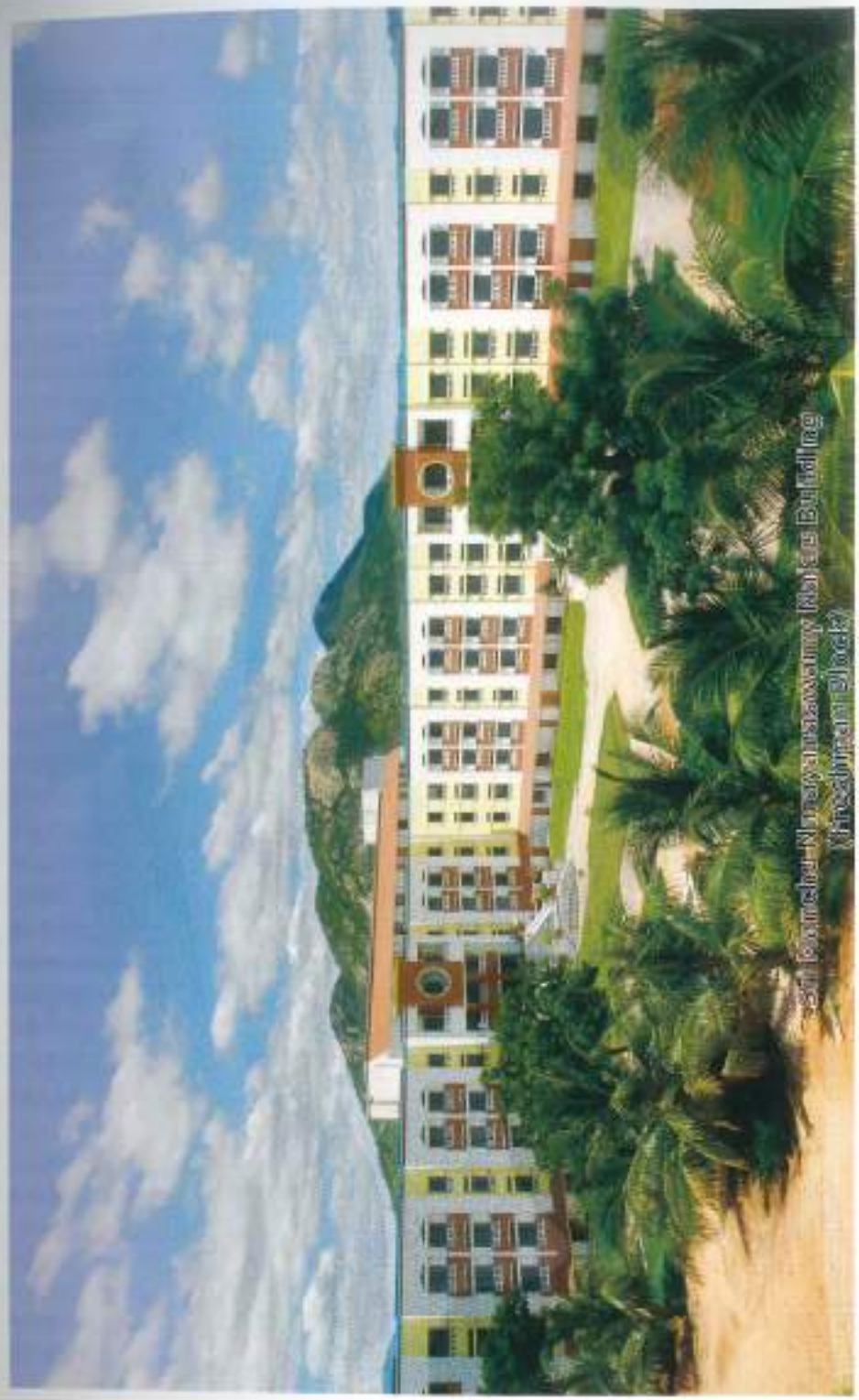
(for the batches admitted from 2018 - 2019)

CHOICE BASED CREDIT SYSTEM

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

(Affiliated to JNTU Anantapur, Approved by AICTE)



VISION AND MISSION OF THE DEPARTMENT

VISION

To become a nation's center of excellence in the field of computer science and applications through teaching, training, and research.

MISSION

- The department of computer applications is established to provide solutions through computer applications.
- Through contemporary curriculum the knowledge of the diverse group of students in dissemination.
- Creating a talent pool of faculty in diverse domains of computer applications through continuous training.
- Domain and transferable skill development for holistic personality of students and employability.
- Inculcating values and Ethics for effective professional practice.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1. Enrolled or completed research studies of societal importance in the core and allied areas of Computer Science.

PEO2. Assume key positions in research, industry and academia.

PEO3. Continued to learn and to adapt to world of constantly evolving technologies in the core or allied areas of Computer Science.

PROGRAM OUTCOMES (POs)

After completion of the program, a successful student will be able to:

PO1. Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.

PO2. Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

PO3. Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO4. 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. Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

PO6. Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practices.

PO7. Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

PO8. Demonstrate knowledge and understanding of the computing 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.

PO9. Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

PO10. Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practices.

PO11. Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

PO12 Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.

PROGRAM SPECIFIC OUTCOMES (PSOs)

On successful completion of M.C.A Program, MCA graduates will be able to:

PSO1. Apply the knowledge of Mathematical foundation, Business Management and Information Technology to the solutions of real world problems.

PSO2. Analyze, Design and Develop solutions in real time in the domains of technical, managerial, economical and social constraints by using current technologies in Information Management, Software Engineering, Platform Based Development, and Computer Networks skills.

PSO3. Use innovative ideas to create better environment in order to solve complex problems in the domains of Information Management, Software Engineering, Platform Based Development and Computer Networks for the excellence of an individual and society.

PSO4. Apply appropriate techniques, resources, and modern tools to complex real time problems in the domains of Information Management, Software Engineering, Platform Based Development and Computer Networks.

MCA IV-SEMESTER

(16MC40101) BIG DATA ANALYTICS

Int. Marks	Ext. Marks	Total Marks	L	T	P	C
40	60	100	4	-	-	4

PREREQUISITES: Courses on "Data warehousing and Data Mining" and "Object Oriented Programming through JAVA".

COURSE DESCRIPTION:

Big data Analytics usage and Outcomes; Types of big data; Challenges of analyzing big data; Analytics tools for big data; Requirements of Hadoop; Adapting Hadoop File systems and I/O; MapReduce Application; Administration of Hadoop; Big data analytics; R Programming on Hadoop.

COURSE OUTCOMES: On successful completion of the course, students will be able to:

CO1. Acquire knowledge on
- Basic concepts of Big Data Analytics and current trends in Big Data
- MapReduce and R Tool
- HDFS and MapReduce in Big Data Hadoop.

CO2. Analyze the big data types as Structured, unstructured and semi-structured.

CO3. Design and develop methods using Map Reduce technique to solve:
- Varieties of data formats in Hadoop Framework for an application.
- Methods, Dimensions, and practices for Big Data applications.

CO4. Solve complex problems in Big Data by adopting appropriate techniques to provide insights for small and medium business.

CO5. Apply modern tools like HIVE and R to perform analytics in an user friendly environment on Hadoop platform.

CO6. Demonstrate knowledge as an individual to manage Weather sensors application.

DETAILED SYLLABUS:

UNIT- I: INTRODUCTION TO BIG DATA ANALYTICS **(11 periods)**

Defining Big Data Analytics : Introduction to Big data, Usage of big data- Basic analytics, Advanced analytics, Operationalized analytics, Monetizing analytics; Modifying Business Intelligence Products to Handle Big Data: Analytical algorithms, Infrastructure support; Big Data Analytics Examples , Big Data Analytics Solutions.

Meet Hadoop: Data Storage and Analysis, Comparison with Other Systems, A Brief History of Hadoop, Apache Hadoop and the Hadoop Ecosystem.

UNIT-II: HADOOP **(10 Periods)**

MapReduce: A Weather Dataset Ecosystem, Analyzing the Data with UNIX Tools, Analyzing the Data with Hadoop, Scaling Out, Hadoop Streaming, Hadoop Pipes.

The Hadoop Distributed File system: The Design of HDFS, HDFS Concepts, The Command-Line Interface, Hadoop File systems.

Hadoop I/O: Data Integrity, Compression, Serialization, File-Based Data Structures.

UNIT – III: APPLICATIONS OF HADOOP MAPREDUCE **(11 Periods)**

Developing a MapReduce Application: The Configuration API, Configuring the Development Environment, Writing a Unit Test, Running Locally on Test Data, Running on a Cluster.

How MapReduce Works: Anatomy of a MapReduce Job Run, Failures, Job Scheduling, Shuffle and Sort, Task Execution.

MapReduce Types and Formats: MapReduce Types, Input Formats, Output Formats.

UNIT -IV: FEATURES AND ADMINISTERING HADOOP **(11 Periods)**

MapReduce Features: Counters, Sorting, Joins, Side Data Distribution, MapReduce Library Classes.

(iii) Sample evidence for "Knowledge areas and courses planned as per APS and industry"

SVEC14 Regulations

B. Tech. (Computer Science and Engineering)
Knowledge Areas as per Association for Computing Machinery (ACM)

Sl. No.	Knowledge Area
1.	Programming Languages
2.	Algorithms and Complexity
3.	Architecture and Organization
4.	Discrete Structures
5.	Information Management
6.	Graphics and Visualization
7.	Business Management
8.	Systems Fundamentals
9.	Operating Systems
10.	Software Development Fundamentals
11.	Networking and Communication
12.	Computational Science
13.	Software Engineering
14.	Information Assurance and Security
15.	Parallel and Distributed Computing
16.	Platform Based Development
17.	Intelligent Systems
18.	Human Computer Interaction

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

SREE SAINATH NAGAR, A. RANGAMPET – 517102

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Structure with Knowledge Area, Category and Credits

(SVEC-14 Regulations) B.Tech. (CSE)

S. No.	Course Code	Course Title	Knowledge Area	Category	Credits
I Year B.TECH (CSE)					
1.	14BT1HS01	Technical English	-	HS	4
2.	14BT1BS01	Engineering Physics	-	BS	4
3.	14BT1BS02	Engineering Chemistry	-	BS	4
4.	14BT1BS03	Engineering Mathematics	-	BS	6
5.	14BT1BS04	Mathematical Methods	-	BS	6
6.	14BT1ES02	Problem Solving and Computer Programming	Programming Languages	ES	6
7.	14BT1ES03	Computer-Aided Engineering Drawing	-	ES	3
8.	14BT1BS05	Engineering Physics and Engineering Chemistry Lab.	-	BS	3
9.	14BT1ES05	Problem Solving and Computer Programming Lab.	Programming Languages	ES	3
10.	14BT1ES06	Engineering and IT Workshop	-	ES	3
11.	14BT1HS02	English Language Communication Skills Lab.	-	HS	3
II-B.TECH (CSE) I-SEMESTER					
12.	14BT3BS03	Probability and Statistics	--	BS	3
13.	14BT30501	Data Structures	Algorithms and Complexity	PC	3
14.	14BT30502	Digital Logic Design	Architecture and Organization	PC	3
15.	14BT31201	Discrete Mathematical Structures	Discrete Structures	PC	3
16.	14BT30235	Basic Electrical Engineering	--	ES	3
17.	14BT30431	Electronic Devices and Circuits	--	ES	3
18.	14BT30521	Data Structures Lab	Algorithms and Complexity	PC	2
19.	14BT30422	Analog and Digital Electronics Lab	--	ES	2
II-B.TECH (CSE) II-SEMESTER					
20.	14BT4HS01	Business Communication and Presentation Skills	--	HS	3
21.	14BT3HS01	Environmental Sciences	--	HS	3

S. No.	Course Code	Course Title	Knowledge Area	Category	Credits
22.	14BT40501	Computer Organization	Architecture and Organization	PC	3
23.	14BT40502	Database Management Systems	Information Management	PC	3
24.	14BT40503	Design and Analysis of Algorithms	Algorithms and Complexity	PC	3
25.	14BT41201	Object Oriented Programming	Programming Languages	PC	3
26.	14BT41501	Computer Graphics	Graphics and Visualization	PC	3
27.	14BT40521	Database Management systems Lab	Information Management	PC	2
28.	14BT41221	Object Oriented Programming Lab	Programming Languages	PC	2
III-B.TECH (CSE) I-SEMESTER					
29.	14BT5HS02	Management Science	Business Management	HS	3
30.	14BT4HS02	Professional Ethics	--	HS	3
31.	14BT50501	Theory of Computation	Systems Fundamentals	PC	3
32.	14BT50502	UNIX Internals	Operating Systems	PC	3
33.	14BT51202	Software Engineering	Software Development Fundamentals	PC	3
34.	14BT51501	Operating Systems	Operating Systems	PC	3
35.	14BT50431	Microprocessors and Interfacing	Architecture and Organization	PC	3
36.	14BT50521	Operating Systems and Unix Lab	Operating Systems	PC	2
37.	14BT50424	Microprocessors and Interfacing Lab	Architecture and Organization	PC	2
III-B.TECH (CSE) II-SEMESTER					
38.	14BT5HS01	Managerial Economics and Principles of Accountancy	Business Management	HS	3
39.	14BT60501	Object Oriented Analysis and Design	Programming Languages	PC	3
40.	14BT51201	Computer Networks	Networking and Communication	PC	3
41.	14BT61202	Web Programming	Platform Based Development	PC	3
42.	14BT71507	Software Project Management	Software Engineering	PC	3
43.	ALL	OPEN-ELECTIVE	--	OE	3
44.	14BT60521	OOAD Lab	Programming Languages	PC	2
45.	14BT61222	Web Programming Lab	Platform Based Development	PC	2

S. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IV-B.TECH (CSE) I-SEMESTER					
46.	14BT70501	Compiler Design	Programming Languages, Systems Fundamentals	PC	3
47.	14BT70502	Mobile Computing	Networking and Communication	PC	3
48.	14BT61201	Data Warehousing and Data Mining	Information Management	PC	3
49.	14BT71204	Software Testing Techniques	Software Engg, Information Assurance and Security	PC	3
50.	14BT70503	Advanced Computer Architecture (Professional Elective-I)	Parallel and Distributed Computing	PE	3
51.	14BT71205	Machine Learning (Professional Elective-I)	Intelligent Systems	PE	3
52.	14BT71501	Embedded System Programming (Professional Elective-I)	Operating Systems	PE	3
53.	14BT71504	Simulation and Modeling (Professional Elective-I)	Computational Sciences	PE	3
54.	14BT71202	Multimedia and Application Development (Professional Elective-II)	Information Management	PE	3
55.	14BT71206	Service Oriented Architecture (Professional Elective-II)	Systems Fundamentals	PE	3
56.	14BT81503	Human computer Interaction (Professional Elective-II)	Human Computer Interaction	PE	3
57.	14BT81505	Software Architecture (Professional Elective-II)	Software Engineering	PE	3
58.	14BT70521	Software Testing Techniques Lab	Software Engg, Information assurance and Security	PC	2
59.	14BT71521	Data Warehousing and Data Mining Lab	Information Management	PC	2
60.	14BT70522	Seminar	-	-	2
IV-B.TECH (CSE) II-SEMESTER					
61.	14BT80501	Design Patterns	Human Computer Interaction	PC	3
62.	14BT81201	Cloud Computing	Parallel and Distributed Computing	PC	3
63.	14BT80502	Big Data (Professional Elective-III)	Intelligent Systems	PE	3
64.	14BT80503	Computer Forensics (Professional Elective-III)	Information assurance and security	PE	3
65.	14BT80504	Distributed Systems (Professional Elective-III)	Operating Systems	PE	3

S. No.	Course Code	Course Title	Knowledge Area	Category	Credits
66.	14BT81202	Cryptography and Network Security (Professional Elective-III)	Information Assurance and Security	PE	3
67.	14BT80505	Network Management (Professional Elective-IV)	Networking and Communication	PE	3
68.	14BT71201	Mobile Application Development (Professional Elective-IV)	Networking and Communication	PE	3
69.	14BT81204	Information Retrieval Systems (Professional Elective-IV)	Information Management	PE	3
70.	14BT81206	Semantic Web (Professional Elective-IV)	Platform Based Development	PE	3
71.	14BT80521	Comprehensive Viva-Voce	All Knowledge Areas	-	2
72.	14BT80522	Project Work	All Knowledge Areas	-	10

OPEN ELECTIVES

Offering Dept	Course Code	Course Title
BS&H	14BT6HS01	Banking and Insurance
BS&H	14BT6HS02	Cost Accounting and Financial Management
BS&H	14BT6HS03	Entrepreneurship for Micro,Small and Medium Enterprises
CE	14BT70105	Disaster Mitigation and Management
CE	14BT70106	Environmental Pollution and Control
CE	14BT70107	Contract Laws and Regulations
CE	14BT70108	Planning for Sustainable Development
CE	14BT70109	Rural Technology
ME	14BT60305	Artificial Intelligence and Robotics
ME	14BT60306	Global Strategy and Technology
ME	14BT60307	Intellectual Property Rights and Management
ME	14BT60308	Managing Innovation and Entrepreneurship
ME	14BT60309	Material Science
CSE	14BT60502	Engineering Systems Analysis and Design
EIE	14BT71005	Microelectromechanical Systems
IT	14BT61203	Bio-Informatics
IT	14BT61204	Cyber Security and Laws

Chairman, BOS (CSE)

CHAIRMAN, B.O.S.
COMPUTER SCIENCE & ENGINEERING
SREE VIDYANIKETHAN ENGINEERING COLLEGE
Sree Sainath Nagar, A. Rangampet
Near TIRUPATI - 517 102, A.P.

HOD, CSE

HEAD
Dept. of Computer Science & Engineering
SREE VIDYANIKETHAN ENGINEERING CO
Sree Sainath Nagar, A. RANGAMPET
TIRUPATI (DIST.) - 517 102, A.P.

SVEC14 Regulations

M. Tech. (Computer Science)

Knowledge Areas as per Association for Computing Machinery (ACM)

Sl. No.	Knowledge Area
1.	Networking and Communications
2.	Information Management
3.	Software Engineering
4.	Algorithms and Complexity
5.	Discrete Structures
6.	Graphics and Visualization
7.	Operating Systems
8.	Software Engineering
9.	Architecture and Organization
10.	Platform Based Development
11.	Information Assurance and Security
12.	Networking and Communication
13.	Parallel and Distributed Computing

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

SREE SAINATH NAGAR, A. RANGAMPET – 517 102

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

M. Tech (COMPUTER SCIENCE)

COURSE STRUCTURE (SVEC14)

I-SEMESTER

Sl. No	Course Code	Course Title	Knowledge Area	Category	Credits
1	14MT10501	Advanced Computer Networks	Networking & Communications	PC	4
2	14MT10502	Advanced Database Management Systems	Information Management	PC	4
3	14MT10503	Advanced Software Engineering	Software Engineering	PC	4
4	14MT10504	Data Structures and Algorithms	Algorithms & Complexity	PC	4
5	14MT10505	Discrete Structures & Graph Theory	Discrete Structures	PC	4
	Elective-1				
6	14MT10506	Computer Graphics & Animation	Graphics & Visualization	PE	4
7	14MT10507	Embedded Systems	Operating Systems		
8	14MT10508	Information Retrieval Systems	Information Management		
9	14MT10509	Software Project Management	Software Engineering		
10	14MT10310	Research Methodology	-	PC	3
11	14MT10521	Data Structures and Advanced Database Management Systems Laboratory	Algorithms & Complexity - Information Management	PC	2

CHAIRMAN, B.O.S.
COMPUTER SCIENCE & ENGINEERING
SREE VIDYANIKETHAN ENGINEERING COLLEGE
Sree Sainath Nagar, A. Rangampet
Near TIRUPATI - 517 102, A.P.

HEAD
Dept. of Computer Science & Engineering
SREE VIDYANIKETHAN ENGINEERING COLLEGE
Sree Sainath Nagar, A. RANGAMPET
CHITTOOR (DT)-517 102, A.P.

II-SEMESTER

Sl. No	Course Code	Course Title	Knowledge Area	Category	Credits
1	14MT20501	Advanced Computer Architecture	Architecture & Organization	PC	4
2	14MT20502	Advanced Operating Systems	Operating Systems	PC	4
3	14MT20503	Data Warehousing and Data Mining	Information Management	PC	4
4	14MT20504	Object Oriented Analysis and Design	Software Engineering	PC	4
5	14MT20505	Web Programming	Platform Based Development	PC	4
	Elective-2				
6	14MT20506	Big Data Analytics	Information Management	PE	4
7	14MT20507	Information Security	Information Assurance and Security		
8	14MT20508	Mobile Computing	Networking & Communications		
9	14MT20509	Virtualization and Cloud Computing	Parallel & Distributed Computing		
10	14MT20521	Seminar	-	PE	2
11	14MT20522	Web Programming and OOAD Laboratory	Platform Based Development - Software Engineering	PC	2

III-SEMESTER

S. No	Course Code	Course Title	Knowledge Area	Category	Credits
1.	14MT30521	Project Work – Phase I	ALL	PC	4

IV-SEMESTER

S. No	Course Code	Course Title	Knowledge Area	Category	Credits
1.	14MT30521	Project Work – Phase II	ALL	PC	12

CHAIRMAN, B.O.S.
COMPUTER SCIENCE & ENGINEERING
SREE VIDYANIKETHAN ENGINEERING COLLEGE
Sree Sainath Nagar, A. Rangampet
Near TIRUPATI - 517 102, A.P.

HEAD
Dept. of Computer Science & Engineering
SREE VIDYANIKETHAN ENGINEERING COLLEGE
Sree Sainath Nagar, A. RANGAMPET
CHITTOOR (Dt)-517 102, A.P.

SVEC16 Regulations

B. Tech. (Civil Engineering)

Knowledge Areas as per American Society of Civil Engineers (ASCE)

Sl. No.	Knowledge Area
1.	Structural Engineering
2.	Geotechnical Engineering
3.	Water Resources Engineering
4.	Construction Engineering
5.	Transportation Engineering
6.	Surveying
7.	Environmental Engineering

S.No.	Acronym	Course Category
1	BS	Basic Sciences
2	ES	Engineering Sciences
3	HS	Humanities and Social Sciences
4	PC	Program Core
5	PE	Program Electives
6	OE	Open Electives

Dept. of CIVIL ENGINEERING

B. Tech (CIVIL ENGINEERING)

SVEC16

Sl. No.	Course Code	Course Title	Semester/ Year	Knowledge Area	Category	Credits
1.	16BT20102	Engineering Mechanics	I /II	Structural Engineering	PC	3
2.	16BT30103	Mechanics of Solids	II/I		ES	3
3.	16BT30132	Strength of Materials Lab	II/I		PC	2
4.	16BT40104	Structural Analysis – I	II/II		PC	3
5.	16BT50104	Structural Analysis-II	III/I		PC	3
6.	16BT50102	Reinforced Cement Concrete Structures	III/I		PC	3
7.	16BT50131	Computer Aided Building Planning and Drawing Lab	III/I		PC	2
8.	16BT60103	Steel Structures	III/II		PC	3
9.	16BT60106	Advanced Structural Analysis	III/II		PE-I	3
10.	16BT60131	Computer Aided Design and Detailing Lab	III/II		PE-II	2
11.	16BT60105	Advanced Reinforced Cement Concrete Structures	III/II		PE-I	3
12.	16BT60111	Structural Health Monitoring	III/II		PE-I	3
13.	16BT70123	Prestressed Concrete	IV/I		PE-IV	3
14.	16BT70108	Structural Dynamics	IV/I		PE-II	3
15.	16BT70112	Earthquake Resistant Design of Structures	IV/I		PE-III	3
16.	16BT70119	Bridge Engineering	IV/I		PE-III	3
17.	16BT70111	Advanced Steel Structures	IV/I		PE-III	3
18.	16BT70124	Rehabilitation and Retrofitting of Structures	IV/I		PE-IV	3

19.	16BT70131	Civil Engineering Software Lab	IV/I		EEC	2
20.	16BT40102	Engineering Geology	II/II	Geotechnical Engineering	PC	3
21.	16BT40132	Engineering Geology Lab	II/II		PC	2
22.	16BT50103	Soil Mechanics	III/I		PC	3
23.	16BT50133	Geotechnical Engineering Lab	III/I		PC	2
24.	16BT60101	Foundation Engineering	III/II		PC	3
25.	16BT60108	Geoenvironmental Engineering	III/II		PE-I	3
26.	16BT70104	Advanced Foundation Engineering	IV/I		PE-II	3
27.	16BT70116	Soil Dynamics and Machine Foundation	IV/I		PE-III	3
28.	16BT70120	Ground Improvement Techniques	IV/I		PE-IV	3
29.	16BT30102	Fluid Mechanics and Hydraulic Machinery	II/I	Water Resources Engineering	PC	3
30.	16BT30131	Fluid Mechanics and Hydraulic Machinery Lab	II/I		PC	2
31.	16BT40103	Engineering Hydrology	II/II		PC	3
32.	16BT50101	Irrigation Engineering	III/I		PC	3
33.	16BT60109	Ground Water Development & Management	III/II		PE-I	3
34.	16BT70110	Water Resources System Planning and Management	IV/I		PE-II	3
35.	16BT70117	Watershed Management	IV/I		PE-III	3
36.	16BT70121	Hydro Power Engineering	IV/I		PE-IV	3
37.	16BT20101	Building Materials and Concrete Technology	I/II	Construction Engineering	PC	3
38.	16BT20131	Building Materials and Concrete Technology Lab	I/II		PC	2
39.	16BT30101	Construction, Planning & Project Management	II/I		PC	3
40.	16BT40101	Concrete Technology	II/II		PC	3
41.	16BT40131	Concrete Technology Lab	II/II		PC	2
42.	16BT60111	Structural Health Monitoring	III/II		PC	3
43.	16BT70105	Architecture and Town Planning	IV/I		PE-II	3
44.	16BT70101	Estimation, Costing & Valuation	IV/I		PC	3
45.	16BT70115	Infrastructure Development and Management	IV/I		PE-III	3
46.	16BT60112	Building Maintenance and Repair	III/II		OE	3
47.	16BT60113	Contract Laws and Regulations	III/II		OE	3

48.	16BT60118	Rural Technology	III/II		OE	3
49.	16BT60102	Highway and Traffic Engineering	III/II	Transportation Engineering	PC	3
50.	16BT60132	Highway Engineering Lab	III/II		PC	2
51.	16BT70103	Railway, Airport and Harbour Engineering	IV/I		PC	3
52.	16BT70109	Transportation Planning and Management	IV/I		PC	3
53.	16BT70122	Pavement Analysis and Design	IV/I		PE-IV	3
54.	16BT70113	Highway Construction and Maintenance	IV/I		PE-III	3
55.	16BT30104	Surveying	II/I	Surveying	PC	3
56.	16BT30133	Surveying Lab	II/I		PC	2
57.	16BT60107	Advanced Surveying	III/II		PE-I	3
58.	16BT70102	Geospatial Technologies	IV/I		PC	3
59.	16BT70132	Remote Sensing and Geographical Information Systems Lab	IV/I		PC	3
60.	16BT70107	Global Positioning System (GPS)	IV/I		PE-II	3
61.	16BT3HS01	Environmental Studies	II/II	Environmental Engineering	HS	3
62.	16BT40105	Water Supply Engineering	II/II		PC	3
63.	16BT50105	Wastewater Technology	III/I		PC	3
64.	16BT50132	Environmental Engineering Lab	III/I		PC	2
65.	16BT60110	Solid Waste Management	III/II		PE-I	3
66.	16BT70106	Environmental Impact Assessment and Management	IV/I		PE-II	3
67.	16BT70114	Industrial Waste Water Treatment	IV/I		PE-III	3
68.	16BT60114	Disaster Mitigation and Management	III/II		OE	3
69.	16BT60115	Environmental Pollution and Control	III/II		OE	3
70.	16BT60116	Planning for Sustainable Development	III/II		OE	3
71.	16BT70412	Green Technologies	III/II		OE	3
72.	16BT70118	Air Pollution and Control	IV/I		PE-IV	3

S.No.	Acronym	Course Category
1	BS	Basic Sciences
2	ES	Engineering Sciences
3	HS	Humanities and Social Sciences
4	PC	Program Core
5	PE	Program Electives
6	OE	Open Electives
7	EEC	Employability Enhancement Course

HoD, CE

HOD, Dept. of Civil Engineering
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, TIRUPATI.
Chittoor Dt.-517 102. (A.P.)

SVEC16 Regulations

B. Tech. (Mechanical Engineering)

Knowledge Areas as per American Society for Mechanical Engineers (ASME)

Sl. No.	Knowledge Area
1.	Design
2.	Production
3.	Thermal
4.	Industrial

SREE VIDYANIKETHAN ENGINEERING COLLEGE

Sree Sainath Nagar, Tirupati – 517 102.

SVEC16 B. Tech. Specific Course Structure with knowledge areas (Mechanical Engineering)

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
		I Year B.Tech. I-Sem			
1	16BT1HS01	Technical English	--	HS	4
2	16BT1BS01	Engineering Chemistry	--	BS	4
3	16BT1BS03	Matrices and Numerical Methods	--	BS	4
4	16BT1BS04	Multi-Variable Calculus and Differential Equations	--	BS	6
5	16BT10501	Programming in C	--	ES	6
6	16BT1HS31	English Language Lab	--	HS	3
7	16BT1BS31	Engineering Chemistry Lab	--	BS	3
8	16BT10331	Computer Aided Engineering Drawing	Design	ES	7
9	16BT10531	Programming in C Lab	--	ES	3

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
		I Year B.Tech. II Sem			
1	16BT1BS02	Engineering Physics	--	BS	3
2	16BT2BS01	Transformation Techniques and Partial Differential Equations	--	BS	3
3	16BT20102	Engineering Mechanics	Design	ES	4
4	16BT20241	Basic Electrical and Electronics Engineering	--	ES	3
5	16BT20301	Engineering Materials	Production	ES	3
6	16BT1BS32	Engineering Physics Lab	--	BS	2
7	16BT20251	Electrical and Electronics Engineering Lab	--	ES	2
8	16BT20331	Engineering Workshop Practice	Production	ES	2
9	16BT20332	Materials Science Lab	Production	ES	2

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IIYear B.Tech. I Sem					
1	16BT3BS01	Probability Distributions and Statistical Methods	--	BS	3
2	16BT30301	Engineering Metallurgy	Production	PC	3
3	16BT30302	Kinematics of Machinery	Design	PC	3
4	16BT30303	Manufacturing Technology	Production	PC	3
5	16BT30304	Strength of Materials	Design	PC	3
6	16BT30305	Thermodynamic s	Thermal	PC	3
7	16BT30331	Computer Aided Machine Drawing Lab	Design	PC	2
8	16BT30332	Manufacturing Technology Lab	Production	PC	2
9	16BT30132	Strength of Materials Lab	Design	PC	2

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IIYear B.Tech. II Sem					
1	16BT3HS01	Environmental Studies	--	HS	3
2	16BT40301	Design of Machine Elements – I	Production	PC	3
3	16BT40302	Dynamics of Machinery	Design	PC	3
4	16BT40303	Fluid Mechanics	Production	PC	3
5	16BT40304	Machine tools and Modern Machining Processes	Design	PC	3
6	16BT40305	Thermal Engineering - I	Thermal	PC	3
7	16BT40331	Fluid Mechanics Lab	Design	PC	2
8	16BT40332	Machine Tools Lab	Production	PC	2
9	16BT4HS31	Soft Skills Lab	Design	PC	2

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IIIYear B.Tech. I Sem					
1	16BT50301	Design of Machine Elements –II	Design	PC	3
2	16BT50302	Industrial Engineering and Management	Industrial	HS	3
3	16BT50303	Metrology and Measurements	Production	PC	3
4	16BT50304	Refrigeration and Air – conditioning	Thermal	PC	3
5	16BT50305	Thermal Engineering - II	Thermal	PC	3
6	16BT50306	Human Resources Management	Industrial	IDE	3
7	16BT50307	Instrumentation and Control Systems	Production	IDE	3
8	16BT50308	Mechatronics	Production	IDE	3
9	16BT40502	Database Management System	--	IDE	3
10	16BT50331	Dynamics and Vibrations Lab	Design	PC	2
11	16BT50332	Internal Combustion Engines Lab	Thermal	PC	2
12	16BT50333	Metrology and Instrumentation Lab	Production	PC	2

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IIIYear B.Tech. II Sem					
1	16BT3HS02	Managerial Economics and Principles of Accountancy	-	HS	3
2	16BT60301	CAD/CAM	Design	PC	3
3	16BT60302	Heat Transfer	Thermal	PC	3
4	16BT60303	Non-Conventional Energy Sources	Thermal	IDE	3
5	16BT50402	Microprocessors and Microcontrollers	--	IDE	3
6	16BT41202	Java programming	--	IDE	3
7	16BT51201	Computer Graphics and Multimedia	--	IDE	3
8	16BT60304	Gas Turbines and Jet Propulsion	Thermal	PE	3
9	16BT60305	Hydraulics and Pneumatics	Production	PE	3
10	16BT60306	Mechanical Vibrations	Design	PE	3
11	16BT60307	Supply Chain Management	Industrial	PE	3
12		Open Electives	--	OE	3
13	16BT60331	CAD and Simulation Lab	Design	PC	2
14	16BT60332	Heat Transfer Lab	thermal	PC	2
15	16BT60333	Seminar	--	EEC	2
16	16BT6MOOC	MOOC	All		

Sl. No.	Course Code	Open Elective Course Title	Sl. No.	Course Code	Open Elective Course Title
1.	16BT6HS01	Banking and Insurance	16.	16BT60114	Disaster Mitigation and Management
2.	16BT6HS02	Business Communication and Career Skills	17.	16BT60115	Environmental Pollution and Control
3.	16BT6HS03	Cost Accounting and Financial Management	18.	16BT60116	Planning for Sustainable Development
4.	16BT6HS04	Entrepreneurship for Micro, Small and Medium Enterprises	19.	16BT60117	Professional Ethics
5.	16BT6HS05	French Language	20.	16BT60118	Rural Technology
6.	16BT6HS06	German Language	21.	16BT60308	Global Strategy and Technology
7.	16BT6HS07	Indian Constitution	22.	16BT60309	IPR and Management
8.	16BT6HS08	Indian Economy	23.	16BT60310	Managing Innovation and Entrepreneurship
9.	16BT6HS09	Indian Heritage and Culture	24.	16BT60311	Material Science
10.	16BT6HS10	Indian History	25.	16BT70412	Green Technologies
11.	16BT6HS11	Personality Development	26.	16BT70413	Introduction to Nanoscience and Technology
12.	16BT6HS12	Philosophy of Education	27.	16BT60505	Engineering System Analysis and Design
13.	16BT6HS13	Public Administration	28.	16BT71011	Micro-Electro-Mechanical Systems
14.	16BT60112	Building Maintenance and Repair	29.	16BT61205	Cyber Security and Laws
15.	16BT60113	Contract Laws and Regulations	30.	16BT61505	Bio-informatics

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IV Year B.Tech. I Sem					
1	16BT70301	Automobile Engineering	Thermal	PC	3
2	16BT70302	Finite Element Method	Design	PC	3
3	16BT70303	Operations Researc h	Industrial	PC	3
4	16BT70304	Cryogenics	Production	PE	3
5	16BT70305	Geometric Modeling	Design	PE	3
6	16BT70306	Quality Management and Reliability Engineering	Industrial	PE	3
7	16BT70307	Tool design	Production	PE	3
8	16BT70308	Computational Fluid Dynamics	Thermal	PE	3
9	16BT70309	Industrial Robotics	Production	PE	3
10	16BT70310	Product Design	Design	PE	3
11	16BT70311	Production and Operations Management	Industrial	PE	3
12	16BT70312	Power Plant Engineering	Thermal	PE	3
13	16BT70313	Project Management	Industrial	PE	3
14	16BT70314	Rapid Prototype Technology	Production	PE	3
15	16BT70315	Tribology	Production	PE	3
16	16BT70331	Computer Aided Manufacturing and Automation Lab	Production	PC	3
17	16BT70332	Industrial Engineering Lab	Industrial	PC	2
18	16BT70333	Comprehensive Assessment	--	EEC	2

Sl. No.	Course Code	Course Title	Knowledge Area	Category	Credits
IV Year B.Tech. I Sem					
1	16BT80331	Project Work*	--	EEC	12

BOS Chairman

CHAIRMAN
Board of Studies
Department of Mechanical Engineering

HOD, ME

Dr. K.C. Varaprasad
Professor & Head
Department of Mechanical Engineering
Sree Vidyanikethan Engineering College
TIRUPATI - 517 102.

(iv) Academic Council Minutes of meeting of approval of syllabus of 2014 and 2016 regulations

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

Sree Sainath Nagar, Tirupati – 517 102, A.P.

8th Meeting of the Academic Council held on 13th May, 2017
(as Autonomous College with effect from 2010-2011)

MINUTES

Members Present:

1.	Dr. P.C. Krishnamachary	Principal, SVEC	Chairman
2.	Dr. V.V. Rama Prasad	Chairman, BOS Computer Science and Engineering	Member
3.	Dr. K. Ramani	Chairperson, BOS Information Technology	Member
4.	Dr. T. Nageswara Prasad	Chairman, BOS Electrical and Electronics Engineering	Member
5.	Dr. M. Saravanan	Chairman, BOS Electronics and Instrumentation Engineering	Member
6.	Dr. O. Eswara Reddy	Chairman, BOS Civil Engineering	Member
7.	Dr. T. Hariprasad	Chairman, BOS Mechanical Engineering	Member
8.	Dr. B. Narendra Kumar Rao	Chairman, BOS Computer Science and Systems Engineering	Member
9.	Dr. A.V.M. Prasad	Chairman, BOS Basic Sciences & Humanities	Member
10.	Dr. M. Lavanya	Chairperson, BOS Master of Computer Applications	Member
11.	Dr. P. Venkat Ramana	HOD, Electronics and Communication Engineering	Member
12.	Dr. K.C. Varaprasad	HOD, Mechanical Engineering	Member
13.	Dr. M. Sunil Kumar	HOD, Computer Science and Engineering	Member
14.	Dr. M.V. Subba Reddy	HOD, Civil Engineering	Member
15.	Dr. K. Suneetha	HOD, Master of Computer Applications	Member
16.	Dr. D.V.S. Bhagavanulu	Professor of Civil Engg.	Member
17.	Dr. S. Hemachandra	Professor of EEE & IIIC Coordinator	Member
18.	Dr. M. Naresh Babu	Associate Professor of CSSE	Member
19.	Dr. N. Padmaja	Professor of ECE	Member
20.	Dr. K. Saradhi	Professor, BS&H & Controller of Examinations	Member
21.	Sri Krishna G.V. Giri	Former Vice-Chairman, Accenture; Chairman & CEO, Adrenalin eSystems	Member
22.	Dr. C. Radha Krishna	Former Director, UGC-ASC, JNTU	Member
23.	Prof. A. Ananda Rao	Director, Academic & Planning, JNTUA, Ananthapuramu	Member
24.	Prof. K. Rama Naidu	Director of Evaluation, JNTUA, Ananthapuramu	Member
25.	Dr. C. Subhas	Dean (Academics) & Chairman, BOS Electronics and Communication Engineering	Member Secretary

Sri Paturu Sumanth, Dr. V. Ramgopal Rao, Sri P. Vanamali and Prof. P. Ramana Reddy could not attend the meeting.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

1.0 Action Taken Report on Minutes of Academic Council Meeting held on 18-05-2016

Principal apprised the members that the 7th meeting of the Academic Council was held on 18-05-2016 and presented the action taken in accordance with the resolutions/ suggestions made,

- Meetings of Boards of Studies were convened under SVEC-16 Academic Regulations
- SVEC-10 Academic Regulations have been successfully implemented during 2010-11 to 2016-17
- SVEC-14 Academic Regulations have been implemented from 2014-15 to 2016-17
- SVEC-16 Academic Regulations have been successfully implemented in 2016-17 for I Year B.Tech., I Year M.Tech., and I Year MCA.

Members resolved that the above Action Taken Report be recorded.

2.0 Report of the Principal for the academic year 2016-17

Members congratulated the Management and the Principal for student admissions made for almost all the sanctioned intake in Diploma, B. Tech., M. Tech. and MCA courses for the academic year 2016-17. The members also congratulated the Management and the Principal for achieving excellent results.

Members appreciated the arrangements made for conducting/organizing various student activities – curricular, co-curricular and extra-curricular activities. Distinguished Lecture by Nobel Laureate, Expert talk by scientist from abroad, Guest Lecture by the Father of Brahmos Aerospace, Special lecture by the Director, IIT Delhi on IoT, APSSDC - Skill Development workshop on Skills Up-gradation and Employability Facilitation, CEOs Speak on Corporate Journey, Digital India Campaign – Financial Literacy and all Outreach Activities were acknowledged. The members suggested that the same efforts may be continued.

3.0 Student Support

Members expressed their satisfaction on the financial support and assistance extended to the students through:

- Financial Support by Sree Vidyanikethan Educational Trust
- GATE Fellowships
- TEQIP-II PG Teaching Assistantship & Research Scholar Assistantship

Tuition Fee reimbursement from Welfare Departments : For the large fee due as reimbursement of fee by the State Government, the members advised the Management to apprise the situation to the State Government and write a representation.

Members appreciated the efforts of the College Management and the Principal in implementing student Placement and Training programmes. The efforts made by the Management for bringing Industry and Corporate to the campus and providing placements to the students of 2017 passed out batch were noted. The members advised that the same approach may be adopted for improving students' placements.

4.0 Faculty Support

Resolved that the existing encouragement / support / incentives to the faculty members may be continued for:

- Publishing Research Papers in Journals
- Receiving Research funding
- Providing incentives for Research Projects
- Motivating Qualification upgradation
- Results achieved in the subject(s) taught
- Academic Promotions
- Attending Faculty Development Programs/Seminars/Workshops/ Refresher Courses

5.0 Research

The members were happy to know that three eminent experts from various fields were appointed to enhance the research and developmental activities in the College.

The research activities carried out in the Institution availing the research facilities provided by the following research laboratories/Clusters/Committees in the College are appreciated by the members:

- National MEMS Design Centre (NMDC)
- Atmospheric Research Laboratory
- Research Advisory Committees

The members expressed their happiness for encouraging faculty members to attend training programs conducted outside the institute; organizing research related technical talks to students; increasing the eligible faculty members to act as Research Supervisors; initiating Research Clusters; according approval to set-up 8 Research labs; and over the efforts of the Management and the Principal in getting Research funding from UGC, DST-FIST,ISRO-RESPOND,AICTE, and other Funding Agencies for completing/submitting proposals which are under active consideration.

6.0 Library

The members congratulated the Management on enhancing the Library with the state-of-the-art facilities benefitting the students, teaching fraternity and research scholars. They also noted the extended hours of the library for the maximum utilization of the library resources.

7.0 Institutional Endowment Gold Medals

The members congratulated the students who were awarded gold medals at the Annual Day celebrations, for their academic excellence and congratulated the College authorities on their efforts in this direction.

8.0 TEQIP - II

The members expressed their happiness over the progress in implementing TEQIP-II activities under Sub-Component 1.1: Strengthening Institutions to improve Learning outcomes and employability of Graduates. They appreciated the efforts of the Principal, TEQIP-II Institutional team members, Deans, HoDs, members of faculty, staff and students of the Institution in implementation of the project activities.

9.0 Proposals

- The members noted that approvals were accorded by AICTE, New Delhi, for the academic year 2017-18 for Extension of Approval for the Existing Programmes and introducing New Course in M.Tech. – Power Electronics and Drives.
- The members congratulated the Management, the Principal and members of faculty concerned for getting Outcome Based Education (OBE) NBA Accreditation for 4 M.Tech Programmes.
- The members noted the proposals submitted by the College to NBA for Re-accreditation of 3 UG Programmes; Fresh Accreditation for 1 UG Programme; and also congratulated the B.Tech. CSSE for getting accredited for an extended validity of one more year.
- The members appreciated the members of the faculty for submitting a good number of proposals under AICTE Quality Improvement Schemes (AQIS) to AICTE, New Delhi.
- The members also noted that the Dept. of CSSE for planning to organize an International Conference on Cognitive Science and Artificial Intelligence (ICCSAI-2017)
- Members have perused the stakeholders' feedback reports and recommended to implement the inputs from feedback in the future revision of the curriculum.
- Members have perused the list of value-added courses and recommended to implement in the next academic year (2017-18).

10.0 Syllabi for eight of the Open Elective Courses for all B.Tech. Programs (SVEC16).

Syllabi for eight of the open elective courses of all B. Tech. Programs namely German Language, French Language, Indian Heritage and Culture, Indian History, Indian Economy, Philosophy of Education, Public Administration and Indian Constitution were approved for implementation.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

11.0 Recommendations of Boards of Studies convened during 22nd to 27th March, 2017.

After perusal, the members approved the recommendations of Boards of Studies on Course Structure of II Year, III Year and IV Year B.Tech. of all programs (SVEC-16) and Syllabi; Course Structure of new M.Tech. Program in Power Electronics and Drives (SVEC-16) and Syllabi; and Course Structure of II and III Year MCA Program (SVEC-16) and Syllabi.

12.0 Academic Calendars

The members approved the academic calendars for II, III & IV Year B.Tech., II Year M.Tech. and II & III Year MCA for the year 2017-2018.

They also authorized the Chairman, Academic Council to implement the academic calendars for I Year M.Tech., I Year MCA and I Year B.Tech. as and when they are finalized after completion of the admission process for these courses by the State Government.

13.0 Achievements

The members congratulated the College on achieving further Extension of Autonomous status for a period of 6 years from the academic year 2016-17 to 2021-22.

The members applauded the College on getting accorded "UGC-Colleges with Potential for Excellence" status under CPE Scheme by UGC, New Delhi.

The members appreciated the College on participating in National Institutional Rank Framework (NIRF), 2017 and having placed within the Rank-band:151-200.

The members congratulated the College on bagging 22 Prathibha Awards for the meritorious students in B.Tech, M.Tech, and Diploma bestowed by the Government of Andhra Pradesh.

The members praised the College on attaining Gold Status in Engineering disciplines participating in the AICTE-CII (Confederation of Indian Industry) Survey.

The members noted that the College has been shortlisted to train unemployed youth from neighboring villages through AICTE – Pradhan Mantri Kaushal Vikas Yojana for Technical Institutions (PMKVY) and considerable amount of youth have been admitted by Department of EEE and ME respectively.

The members also congratulated the students on bagging a Cash Prize of 25,000/- in Smart India Hackathon 2017, a unique initiative proposed by Ministry of HRD and AICTE as a part of Digital Indian Campaign. They also encouraged the College to support the team of students to submit a project proposal for converting the idea into a prototype.

The members praised the College on being identified as one of the Technical Skill Development Institutes by the Govt. of AP through APSSDC, in collaboration with SIEMENS and also for soft-launching 6 State-of-the-art t-SDI laboratories.

The members felt happy to know that students and faculty members for actively participating in events conducted by National Womens Parliament (NWP 2017) at Pavithra Sangamam in the capital city of Amaravati.

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA

14.0 Suggestions

The Hon'ble members of the Academic Council expressed their appreciation on the measures initiated by the College since the last meeting of the Academic Council to improve the academic standards of the College.

The following suggestions were made by the Hon'ble members of the Academic Council:

1. To apprise the state government on schedule of Counseling keeping the dates of counseling of national institutes like IITs and NITs and interaction with **Sri City** Special Economic Zone
2. Prepare a list of Journals for publications from UGC specified list of journals.
3. Form Mentoring Committees at the Department level to monitor the quality of research and to identify industry needs
4. Presentation of Department wise outcomes and achievements
5. Pursuing Linkages with Foreign Universities
6. Present a separate list of students pursuing Higher Education in India and abroad.
7. To display mapping convention of Course Outcome (CO) to Program Outcome (PO) for a few model courses to show the adopted philosophy of Outcome Based Education (OBE).
8. Explore opportunities to tie up with CII to undertake potential consultancy work
9. Sending proposals for external funding under various schemes in innovation, incubation and research.

The Hon'ble members resolved to authorize the Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College to effect necessary changes/ modifications in the Academic Regulations / Syllabi / Evaluation procedures and Results wherever deemed necessary and report the same to the Academic Council at its immediate next meeting for ratification.

The Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College profusely thanked the members for their support and guidance.

(Dr. C. SUBHAS)
Member Secretary

(Dr.P.C.KRISHNAMACHARY)
Chairman, Academic Council & Principal

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Minutes of the EIGHTH Meeting of Academic Council of Sree Vidyanikethan Engineering college (As Autonomous college with effect from 2010-2011) held on 13th May 2017 at 10.30 am in the Conference Hall.

	Members present		Signature
1.	Dr. P.C.KRISHNAMACHARY Principal, SVEC	Chairman	13/05/2017
2.	Dr. V.V. Rama prasad Chairman, BoS computer science & Engineering	Member	
3.	Dr. K. Ramani Chairperson, BoS Information Technology	Member	
4.	Dr. T. Nageswara prasad Chairman, BoS Electrical and Electronics Engineering	Member	
5.	Dr. M. Saravanan Chairman, BoS Electronics and Instrumentation Engineering	Member	
6.	Dr. O. Eswara Reddy Chairman, BoS CIVIL Engineering	Member	
7.	Dr. T. Hari Prasad Chairman, BoS Mechanical Engineering	Member	
8.	Dr. B. Narendra Kumar Rao Chairman BoS, Computer Science and Systems Engineering	Member	
9.	Dr. A.V.M. Prasad Chairman BoS Basic Science and Humanities	Member	

Members Present		Signature.
10. Dr. M. Lavanya Chairperson BoS Master of Computer Applications	Member	
11. Dr. P. Venkata Ramana HOD. Electronics and Communication Engineering	Member	
12. Dr. K.C. Varaprasad HOD Mechanical Engineering	Member	
13. Dr. M. Sunil Kumar HOD Computer Science and Engineering	Member	
14. Dr. M.V. Subba Reddy HOD Civil Engineering	Member	19/5/17
15. Dr. K. Suneetha HOD Master of Computer Applications	Member	
16. Dr. D.V.S. Bhagavanulu Professor of Civil Engineering	Member	

Members Present		Signature
17. Dr. S. Hemachandra Professor of EEE & IIIC coordinator	Member	
18. Dr. M. Naresh Babu Associate Professor of CSSE	Member	
19. Dr. N. Padmaja Professor of ECE	Member	
20. Dr. K. Saradhi Professor, BS&H Controller of Examinations	Member	
21. Sri. Krishna G.V Giri Former Vice Chairman Atomic Energy Chairman & CEO - Advanced Systems	Member	
22. Sri. Paturu Sumanth Managing Director ICOMM Tele LTD. Hyderabad	Member	Not attended
23. Dr. C. Radha Krishna Former Director UGC-ASC, JNTU	Member	
24. Dr. V. Ramgopal Rao Professor, Dept. of Electrical Engineering, IIT Bombay	Member	Not attended

Members Present		Signature
25. Sri. P. Vanamali Former Principal Secretary. Govt. of west Bengal	Special Invitee	Not attended
26. Prof. A. Ananda Rao Director, Academic & Planning. JNTUA, Anantapuramu	Member	
27. Prof. K. Rama Naidu Director of Evaluation JNTUA, Anantapuramu	Member	13.5.17
28. Prof. P. Ramana Reddy Professor & ECE, JNTUACEA, Anantapuramu	Member	Not attended
29. Dr. C. Subhas Dean (Academics) & Chairman. BoS. Electronics & Communication Engineering	Member Secretary	
30. Prof. T. Gopala Rao Special Officer SVET	Special Invitee	
31. Sri. B. Ravisekhar Director, Finance & Admin SVET	Special Invitee	

Members Present		Signature
32. Dr. I. Sudarsan Kumar Chief operating officer SVET	Special Invitee	
33. Dr. Babu K Matam Dean, International Student Affairs SVEC.	Special Invitee	
34. Dr. A.K. Damodaram Prof. & Co-ordinator TEQIP-II SVEC.	Special Invitee	

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

Sree Sainath Nagar, Tirupati – 517 102, A.P.

7th Meeting of the Academic Council held on 18th May, 2016
(as Autonomous College with effect from 2010-2011)

MINUTES

Members Present:

1.	Dr. P.C. Krishnamachary	Principal, SVEC	Chairman
2.	Dr. K. Delhi Babu	Vice-Principal & HOD, Computer Science and Engineering	Member
3.	Dr. V.V. Rama Prasad	Chairman, BOS Computer Science and Engineering	Member
4.	Dr. T. Deva Raju	Chairman, BOS Electrical and Electronics Engineering	Member
5.	Dr. M. Saravanan	Chairman, BOS Electronics and Instrumentation Engineering	Member
6.	Dr. O. Eswara Reddy	Chairman, BOS Civil Engineering	Member
7.	Dr. A.V. Satyanarayana	Chairman, BOS Mechanical Engineering	Member
8.	Dr. K. Ramani	Chairperson, BOS Information Technology	Member
9.	Dr. B. Narendra Kumar Rao	Chairman, BOS Computer Science and Systems Engineering	Member
10.	Dr. A.V.M. Prasad	Chairman, BOS Basic Sciences & Humanities	Member
11.	Dr. M. Lavanya	Chairperson, BOS Master of Computer Applications	Member
12.	Dr. T. Nageswara Prasad	HOD, Electrical and Electronics Engineering	Member
13.	Dr. P.V. Ramana	HOD, Electronics and Communication Engineering	Member
14.	Dr. K.C. Varaprasad	HOD, Mechanical Engineering	Member
15.	Dr. M.V. Subba Reddy	HOD, Civil Engineering	Member
16.	Dr. K. Suneetha	HOD, Master of Computer Applications	Member
17.	Dr. D.V.S. Bhagavanulu	Director & Professor of Civil Engg.	Member
18.	Dr. P. Ramana Reddy	Professor of EEE	Member
19.	Dr. N. Padmaja	Professor of ECE	Member
20.	Dr. K. Saradhi	Controller of Examinations	Member
21.	Sri Paturu Sumanth	Managing Director, ICOMM Tele LTD, Hyderabad	Member
22.	Sri P. Vanamali	Former Principal Secretary, Govt. of West Bengal	Special Invitee
23.	Prof. A. Ananda Rao	Director, Academic & Planning, JNTUA, Ananthapuramu	Member
24.	Prof. K. Rama Naidu	Director of Evaluation, JNTUA, Ananthapuramu	Member
25.	Prof. B. Sarvesh	Professor of EEE, JNTUACEA, Ananthapuramu	Member
26.	Dr. C. Subhas	Dean (Academics) & Chairman, BOS Electronics and Communication Engineering	Member Secretary

Sri Krishna G.V. Giri, Dr. C.Radha Krishna, Dr. V. Ramgopal Rao and Dr. A. Senguttuvan could not attend the meeting.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

1.0 Action Taken Report on Minutes of Academic Council Meeting held on 27-05-2015

Principal apprised the members that the 6th meeting of the Academic Council was held on 27-05-2015 and presented the action taken in accordance with the resolutions/ suggestions made,

- Meetings of Boards of Studies were convened
- SVEC-10 Academic Regulations have been successfully implemented during 2010-11 to 2015-16
- SVEC-14 Academic Regulations have been implemented from 2014-15 to 2015-16

Members resolved that the above Action Taken Report be recorded.

2.0 Report of the Principal for the academic year 2015-16

Members congratulated the Management and the Principal for student admissions made for almost all the sanctioned intake in Diploma, B. Tech, M. Tech and MCA courses for the academic year 2015-16. The members also congratulated the Management and the Principal for achieving excellent results.

Members appreciated the arrangements made for conducting/organizing various student activities – curricular, co-curricular and extra-curricular activities - and suggested that the same efforts may be continued.

3.0 Student Support

Members expressed their satisfaction on the financial support and assistance extended to the students through:

- Tuition Fee reimbursement from Welfare Departments
- Financial Support by Sree Vidyanikethan Educational Trust
- GATE Fellowships
- TEQIP-II Teaching Assistantships & Research Assistantships

Members appreciated the efforts of the College Management and the Principal in implementing student training programmes. The efforts made by the Management for bringing Industry and Corporate to the campus and providing placements to the students of 2016 passed out batch were noted. The members advised that the same approach may be adopted for improving students' placements.

4.0 Faculty Support

Resolved that the existing encouragement / support / incentives to the faculty members may be continued for:

- Publishing Research Papers in Journals
- Receiving Research funding
- Results achieved in the subject(s) taught
- Improving Academic Qualifications
- Attending Faculty Development Programs/Seminars/Workshops/ Refresher Courses

5.0 Research

The members were happy to know that three eminent experts from various fields were appointed to enhance the research and developmental activities in the College.

The research activities carried out in the Institution availing the research facilities provided by the following research laboratories/Committees in the College are appreciated by the members:

- National MEMS Design Centre (NMDC)
- Atmospheric Research Laboratory
- Research Advisory Committees

The members expressed their happiness over the efforts of the Management and the Principal in getting Research funding and for submitting proposals which are under active consideration.

6.0 Grants sanctioned

While congratulating the College authorities, the members noted with satisfaction the grants sanctioned by AICTE/DST-SERB/MHRD during 2015-16 for implementing various academic/research programs in the College.

7.0 Institutional Endowment Gold Medals

The members congratulated the students who were awarded gold medals at the Annual Day celebrations, for their academic excellence and congratulated the College authorities on their efforts in this direction.

8.0 TEQIP - II

The members expressed their happiness over the progress in implementing TEQIP-II activities under Sub-Component 1.1: Strengthening Institutions to improve Learning outcomes and employability of Graduates. They appreciated the efforts of the Principal, TEQIP-II Institutional team members, Deans, HoDs, members of faculty, staff and students of the Institution in implementation of the project activities and also in achieving eligibility for additional funding to the tune of Rs.2.00 crores.

9.0 Proposals

- The members noted that the Expert Committee has been constituted to evaluate the performance and academic attainments for the 'Extension of Autonomous Status for the period 2016-17 to 2021-22.
- The members also noted that the approval given by AICTE for Extension of Approval for the Existing Programmes for the academic year 2016-17 and for admitting Foreign Nationals/PIO/Children of Indian Workers in Gulf Countries from 2016-17 in UG Programs.
- The members congratulated the Management, the Principal and members of faculty concerned for getting Outcome Based Education (OBE) NBA Accreditation for 4 M.Tech Programmes.
- The members noted the proposals to be submitted by the College to NBA for Accreditation/Re-accreditation of 5 UG Programmes and also pre-qualifiers submitted for 2 UG Programmes.
- The members also congratulated the college for getting accorded in "UGC-Colleges with Potential for Excellence" status under CPE Scheme by UGC, New Delhi.
- The members appreciated the college for getting selected and approved as one of the Technical Skill Development Institutions (TSDIs) in collaboration with Andhra Pradesh State Skill Development Corporation (APSSDC), Hyderabad.
- Stakeholders' feedback analysis reports of academic year 2015-16 are perused by the members. Feedback reports and action taken reports of academic years 2014-15 & 2015-16 are perused and relevant inputs are recommended for implementation in SVEC16 regulations.
- The members perused and recommended implementation of the list of value-added courses in the next academic year (2016-17).

10.0 Recommendations of Boards of Studies convened during 22nd & 23rd April, 2016.

After perusal, the members approved the recommendations of Boards of Studies on Academic Regulations SVEC-16 for B.Tech, M.Tech and MCA programs; Course Structure of I Year B. Tech. of all Programs & Syllabi and Syllabi of Common Courses with Question Banks and Panels of Examiners; Course Structure of II Year, III Year and IV Year of all B.Tech. programs; Course Structure of M.Tech. Programs and Syllabi with Question Banks and Panels of Examiners; Course Structure of MCA and Syllabi for I Year MCA with Question Banks and Panels of Examiners.

11.0 Nomination of Experts on Boards of studies for 2016-18

The members resolved to approve the Panels of Experts finalized by the Scrutiny Committee and to authorize the Chairman, Academic Council to select experts outside the approved panels, as and when necessary.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

12.0 Academic Calendars

The members approved the academic calendars for II, III & IV Year B.Tech, II Year M.Tech and II & III Year MCA for the year 2016-2017.

They also authorized the Chairman, Academic Council to implement the academic calendars for I Year M.Tech, I Year MCA and I Year B.Tech as and when they are finalized after completion of the admission process for these courses by the State Government.

13.1 Extension of Academic Period to a M.Tech. Student under SVEC10 regulations:

While noting the issue of non-completion of Project work by Mr. Undeti Shanthivardhan bearing roll number 11121D0716, a student of M.Tech Electrical Power systems, the members resolved to extend the period for completion of the degree by 2016-17 as a special case on medical grounds, subject to the approval of the Governing Body of the College.

13.2 Extension of Academic Period to M.C.A Students under SVEC10 regulations:

While noting the issue of non-completion of Project work by Mr. Avula Vishnukanth Reddy and Mr. A. Vinodh bearing roll numbers 10121F0006 and 10121F00B3 respectively, students of MCA, the members recommend to extend the period for completion of the degree within one year from the date on which they are permitted to register for the course by the student under SVEC-10 regulations, as a special case on humanity grounds, subject to the approval of the Governing Body of the College.

14.0 Achievements

The members congratulated the college on bagging 38 Prathibha Awards for the meritorious students in B.Tech, M.Tech, and Diploma bestowed by the Government of Andhra Pradesh.

The members applauded the college on attaining Gold Status in the AICTE-CII survey in both Engineering disciplines and in Emerging Engineering Institutes out of 2160 participating institutes.

15.0 Suggestions

The Hon'ble members of the Academic Council expressed their appreciation on the measures initiated by the College since the last meeting of the Academic Council to improve the academic standards of the College.

The following suggestions were made by the Hon'ble members of the Academic Council:

1. Use Educational software tools provided by IIT Bombay to train the Students.
2. Check the correlation between internal and external evaluation marks and take measures in case of any significant difference.

3. Procure the plagiarism tool – URKUND being supplied by UGC Free of Cost else, any licensed version of plagiarism tools for checking the research papers / Ph.D Thesis / Project Work Thesis.
4. Encourage students & faculty to publish papers in reputed & peer reviewed, free Journals. It was also suggested that Research Papers must initially be presented at conferences. For this a review committee is to be formed at Department / Institute level.
5. Check the possibility of introducing a course on NSS as suggested by UGC norms.
6. Conduct more Guest lectures for the benefit of the students.
7. Provide graphical presentation of placement related data.
8. Encourage members of faculty to participate in FDP's for a minimum of 2 weeks duration.
9. Nominate or recruit one Research mentor for each department.
10. Establish a Research centre in Computer Science discipline.
11. Prefer Professors as external BOS Members.
12. Suggest students to take MOOC courses conducted for a duration of 40-50 hours.
13. Make the e-presentation for Academic Council meeting 2017 by providing tabs / laptops to members and dispense hard-copies of reports to the members.
14. Introduce SMART Village program in the college for student as an out-reach activity.

The Hon'ble members have appreciated Dr. V. Ramagopal Rao, member of Academic Council who has been appointed as Director, IIT Delhi.

The Hon'ble members resolved to authorize the Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College to effect necessary changes/modifications in the Academic Regulations / Syllabi / Evaluation procedures and Results wherever deemed necessary and report the same to the Academic Council at its immediate next meeting for ratification.

The Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College profusely thanked the members for their support and guidance.

(Dr. C. SUBHAS)
Member Secretary

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

P.C.K. Chap. 18/05/2016
(Dr.P.C.KRISHNAMACHARY)
Chairman, Academic Council & Principal

P.C.K. Chap

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Minutes of the SEVENTH Meeting of Academic council of Sree Vidyanikethan Engineering College (As Autonomous college with effect from 2010-2011) held on 18th May 2016 at 10:30 AM in the conference Hall.

Members Present		Signature
1. Dr. P. C. Krishnamachary Principal, SVEC	Chairman	18/05/2016
2. Dr. K. Delhi Babu Vice-Principal & HOD, Dept. of CSE - SVEC	Member	
3. Dr. V. V. Rama Prasad Chairman, BOS computer Science & Engineering.	Member	
4. Dr. T. Deva Raju Chairman, BOS, Electrical and Electronics Engineering	Member	
5. Dr. M. Saravanan Chairman BOS, Electronics and Instrumentation Engineering	Member	
6. Dr. O. Eswara Reddy Chairman BOS, Civil Engineering.	Member	

Members present		Signature
7. Dr. A.V. Satyanarayana Chairman BOS, Mechanical Engineering	Member	
8. Dr. K. Ramani Chairman BOS, Information Technology	Member	K. Ra
9. Dr. B. Narendra Kumar Rao Chairman BOS, Computer Science & Systems Engineering	Member	Narendra
10. Dr. A.V.M. Prasad Chairman BOS, Basic Sciences and Humanities	Member	
11. Dr. M. Lavanya Chairman BOS, Master of Computer Applications	Member	M. Lavanya
12. Dr. T. Nageswara Prasad Professor & Head Dept. of Electrical and Electronics Engineering.	Member	
13. Dr. P. Venkataramana Professor & Head Dept. of Electronics and Communication Engineering	Member	

Members Present		Signature
14. Dr. K. C. Varaprasad Professor & Head Dept. of Mechanical Engineering	Member	
15. Dr. M. V. Subba Reddy Asst. professor & Head Dept. of Civil Engineering	Member	
16. Dr. K. Suneetha Asst. professor & Head Dept. of Master of Computer Applications	Member	
17. Dr. D. V. S. Bhagavanulu Director and professor Dept. of Civil Engineering	Member	
18. Dr. P. Ramana Reddy professor Dept. of Electrical and Electronics Engineering	Member	
19. Dr. A. Senguttuvan professor Dept. of Computer Science and Engineering	Member	-Not Attended-
20. Dr. N. Padmaja Professor Dept. of Electronics and Communication Engineering	Member	

Members Present		Signature
21. Dr. K. Sasadhi Controller of Examinations	Member	K. Sasadhi
22. Sri Krishna G.V. Giri Managing Director Asia Pacific - Health & Public Services Accenture	Member	- Not Attended -
23. Sri Paturu Sumanth Managing Director ICOMM Tele Ltd Hyderabad.	Member	P.S.M.
24. Dr. C. Radha Krishna Former Director UGC-ASC, JNTU	Member	- Not Attended
25. Dr. V. Rangopal Rao Director IIT Delhi - New Delhi	Member	- Not Attended -
26. Sri P. Vanamali Former Principal Secretary Govt. of West Bengal	Member	P Vanamali

Members present		Signature
27. Prof. A. Ananda Rao Director, Academic & planning JNTUA, Anantapuramu	Member	
28. Prof. K. Rama Naidu Director of Evaluation JNTUA, Anantapuramu	Member	18.5.2018
29. Prof. B. Sarvesh Professor of EEE JNTUCEA, Anantapuramu	Member	
30. Dr. C. Subhas Dean (Academics) & Chairman BOS, Electronics and communication Engineering	Members Secretary	
31. Prof. T. Gopala Rao Special officer SVET	Special Invitee	
32. Sri B. Ravikhar Director, Finance & Admin. SVET	Special Invitee	
33. Dr. I. Sudarsan Kumar Chief operating officer SVET	Special Invitee	

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

Sree Sainath Nagar, Tirupati – 517 102, A.P.

6th Meeting of the Academic Council held on 27th May, 2015
(as Autonomous College with effect from 2010-2011)

MINUTES

Members Present:

1.	Dr. P.C. Krishnamachary	Principal, SVEC	Chairman
2.	Dr. D.V.S. Bhagavanulu	Chairman, BOS Civil Engineering	Member
3.	Dr. D.V. Ramamurthy	Chairman, BOS Mechanical Engineering	Member
4.	Dr. V.V. Rama Prasad	Chairman, BOS Computer Science and Engineering	Member
5.	Dr. K. Ramani	Chairperson, BOS Information Technology	Member
6.	Dr. K. Delhi Babu	Chairman, BOS Computer Science and Systems Engineering	Member
7.	Dr. T. Deva Raju	Chairman, BOS Electrical and Electronics Engineering	Member
8.	Dr. M. Saravanan	Chairman, BOS Electronics and Instrumentation Engineering	Member
9.	Dr. A.V.M. Prasad	Chairman, BOS Basic Sciences & Humanities	Member
10.	Dr. R.Md. Shafi	Chairman, BOS Master of Computer Applications	Member
11.	Sri S. Hema Chandra	Chairman, BOS Electronics and Control Engineering	Member
12.	Sri G. Sreeenivasulu	Chairman, BOS Biotechnology	Member
13.	Prof. C. Madhusudhana Rao	HOD, Computer Science and Engineering	Member
14.	Dr. T. Nageswara Prasad	HOD, Electrical and Electronics Engineering	Member
15.	Prof. P.V. Ramana	HOD, Electronics and Communication Engineering	Member
16.	Prof. N. Gireesh	HOD, Electronics and Instrumentation Engineering	Member
17.	Dr. K.C. Varaprasad	HOD, Mechanical Engineering	Member
18.	Dr. P. Ramesh	HOD, Civil Engineering	Member
19.	Sri B. Narendra Kumar Rao	HOD, Computer Science and Systems Engineering	Member
20.	Dr. P. Ramana Reddy	Professor of EEE	Member
21.	Dr. N. Padmaja	Professor of ECE	Member
22.	Dr. K. Saradhi	Controller of Examinations	Member
23.	Dr. C. Radha Krishna	Former Director, UGC-ASC, JNTU	Member
24.	Sri P. Vanamali	Former Principal Secretary, Govt. of West Bengal	Special Invitee
25.	Prof. A. Ananda Rao	Director, Academic & Planning, JNTUA, Anantapuramu - 515002.	Member
26.	Prof. K. Rama Naidu	Director of Evaluation, JNTUA, Anantapuramu - 515002.	Member
27.	Dr. C. Subhas	Chairman, BOS, ECE & Dean (Academics)	Member Secretary

Sri Krishna G.V. Giri, Sri Paturu Sumanth, Dr. V. Ramgopal Rao, Prof. B. Sarvesh and Dr. A. Senguttuvan could not attend the meeting.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

1.0 Action Taken Report on Minutes of Academic Council Meeting held on 24-05-2014

Principal apprised the members that the 5th meeting of the Academic Council was held on 24-05-2014 and presented the action taken in accordance with the resolutions/ suggestions made,

- Meetings of Boards of Studies were convened
- SVEC-10 Academic Regulations have been successfully implemented during 2010-11 to 2014-15
- SVEC-14 Academic Regulations have been implemented
- SVEC-14 Scheme of Instructions and Syllabi for I Year B.Tech, I Year MCA, I Year M.Tech were adopted.

Members resolved that the above Action Taken Report be recorded.

2.0 Report of the Principal for the academic year 2014-2015

Members congratulated the Management and the Principal for student admissions made for almost all the sanctioned intake in Diploma, B. Tech, M. Tech and MCA courses for the academic year 2014-2015. The members also congratulated the Management and the Principal for achieving excellent results.

Members appreciated the arrangements made for conducting/organizing various student activities – curricular, co-curricular and extra-curricular activities - and suggested that the same efforts may be continued.

3.0 Student Support

Members expressed their satisfaction on the financial support and assistance extended to the students through:

- Tuition Fee reimbursement from Welfare Departments
- Financial Support by Sree Vidyanikethan Educational Trust
- Poor Students Welfare Fund
- GATE Fellowships
- TEQIP-II Teaching Assistantships

Members appreciated the efforts of the College Management and the Principal in implementing student training programmes. The efforts made by the Management for bringing Industry and Corporate to the campus and providing placements to the students of 2015 passed out batch were noted. The members advised that the same approach may be adopted for improving students' placements.

4.0 Faculty Support

Resolved that the existing encouragement / support / incentives to the faculty members may be continued for:

- Publishing Research Papers in Journals
- Receiving Research funding
- Results achieved in the subject(s) taught
- Improving Academic Qualifications
- Attending Faculty Development Programs/Seminars/Workshops/ Refresher Courses

5.0 Research

The research activities carried out in the Institution availing the research facilities provided by the following research laboratories/Committees in the College are appreciated by the members :

- National MEMS Design Centre (NMDC)
- Atmospheric Research Laboratory
- Research Advisory Committees

The members expressed their happiness over the efforts of the Management and the Principal in getting Research funding and for submitting proposals which are under active consideration.

6.0 Grants sanctioned

While congratulating the College authorities, the members noted with satisfaction the grants sanctioned by AICTE/DST-SERB during 2014-15 for implementing various academic/research programs in the College.

7.0 Institutional Endowment Gold Medals

The members congratulated the students who were awarded gold medals at the Annual Day celebrations, for their academic excellence and congratulated the College authorities on their efforts in this direction.

8.0 TEQIP - II

The members expressed their happiness over the progress in implementing TEQIP-II activities under Sub-Component 1.1: Strengthening Institutions to improve Learning outcomes and employability of Graduates.

9.0 Proposals

The members noted the approval given by AICTE for *Extension of Approval for the Existing Programmes* for the academic year 2015-16 and for admitting 15% supernumerary seats for Foreign Nationals/PIO/Children of Indian Workers in Gulf Countries from 2015-16 in UG Programs.

The members congratulated the Management, the Principal and members of faculty concerned for getting Outcome Based Education (OBE) NBA Accreditation for B.Tech Programs in EEE and CSSE for 2 years.

The members also noted the proposals submitted by the College to NBA for Accreditation of PG Programs.

The efforts of the Management in submitting the proposal for seeking additional funding of Rs. 480 lakh under revised 'Institutional Development Proposal' of TEQIP Phase-II, in view of the extension of the project period till October, 2016 were noted with satisfaction.

Members have perused the stakeholders' feedback reports and recommended to implement the feedback in the next revision of the curriculum.

Members have perused the list of value-added courses and recommended to implement in the next academic year (2015-16).

10.0 Recommendations of Boards of Studies convened during 8th to 19th April, 2015.

After perusal, the members approved the recommendations of Boards of Studies on Course Structure and Syllabi for II Year, III Year and IV Year of all B.Tech programs.

The members resolved to approve the Panels of Experts finalized by the Scrutiny Committee and to authorize the Chairman, Academic Council to select experts outside the approved panels, as and when necessary.

11.0 Academic Calendars

The members approved the academic calendars for II, III & IV year B.Tech and II & III year MCA for the year 2015-2016.

They also authorized the Chairman, Academic Council to implement the academic calendars for M.Tech, I year MCA and I year B.Tech as and when they are finalized after completion of the admission process for these courses by the State Government.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

12.0 Extension of Academic Period to a M.Tech. Student under SVEC10 regulations:

While noting the issue of non-completion of Project work by Ms. P. Usha Sree bearing roll number 11121D0314, a student of M.Tech Biotechnology, the members recommend to extend by one year to complete the course by 2015-16 by the student under SVEC-10 Regulations, as a special case on medical grounds, subject to the approval of the Governing Body of the College.

13.0 New Programs

The members expressed their happiness over the implementation of the new programs during 2014-15 by the Institution for the benefit of the students/faculty members :

- Start-up Bootcamp Programme
- Technology Entrepreneurship Program (TEP)
- Knowledge Incubation for Technical Education (KITE)
- Skill Development Center (SDC)

14.0 Preserving Attendance Registers and Answer Scripts

Resolved to preserve attendance registers and answer scripts of both internal and external examinations of all years for one more year after passing out of specific batch of B.Tech, M.Tech and MCA programs, after which they will be sent for recycling.

15.0 Suggestions

The Hon'ble members of the Academic Council expressed their appreciation on the measures initiated by the College since the last meeting of the Academic Council to improve the academic standards of the College.

The following suggestions were made by the Hon'ble members of the Academic Council:

1. BOS Chairpersons should suggest names of the standard journals to the Principal for giving incentives to the Faculty.
2. Compare SVEC results with JNTUA results. Also mention steps taken to improve the results.
3. Start a student chapter of IETE.
4. Organize seminar/symposia/professional society activities on a particular day in a week/month.
5. Provide review mechanism of student papers before submitting for presentation/publication.

6. Provide a report on outcome of the FDPs/Workshops/Seminars/Paper presentations attended by the faculty.
7. Allot workload to the PG students/research scholars who are getting stipend from the AICTE/ TEQIP/Institution.
8. Demarcate workload of the faculty based on teaching/research/ administration/ consultancy.
9. Verify the quality of the internal question papers.
10. Provide the list of entrepreneurs from among the Alumni of the College since inception.
11. Provide placement details for UG & PG separately.
12. Include library resource material (Books/Journals/Software/CDs etc.) purchased in the current academic year for the Central Library.
13. As per G.O. 17 include CBCS, MOOCS, Online examinations, Gap year and minor degree for the students at the earliest.
14. Automation of academic/administrative processes should be done.
15. PAT Office should also inform the students about civil services/ engineering services.
16. Mention about MoUs and activities taken under each MoU.
17. Identify the courses which can use new educational technology tools.
18. Academic linkages with reputed organizations need to be established.

The Hon'ble members resolved to authorize the Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College to effect necessary changes/modifications in the Academic Regulations / Syllabi / Evaluation procedures and Results wherever deemed necessary and report the same to the Academic Council at its immediate next meeting for ratification.

The Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College profusely thanked the members for their support and guidance.

27/5/15

(Dr. C. SUBHAS)
Member Secretary

SREE VIDYANIKETHAN ENGG. COLLEGE ★ TIRUPATI ★

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

27/05/2015

(Dr.P.C.KRISHNAMACHARY)
Chairman, Academic Council & Principal

Minutes of the SIXTH Meeting of Academic council of Sree Vidyanikethan Engineering college (as Autonomous college with effect from 2010-2011) held on 27th May 2015 at 10:30 AM in the conference Hall.

Members Present		Signature
1. Dr. P. C. Krishnamachary Principal, SVEC	Chairman	27/05/2015
2. Dr. D.V.S. Bhagavanulu Chairman, BOS, Civil Engineering	Member	
3. Dr. D.V. Ramamurthy Chairman, BOS Mechanical Engineering	Member	
4. Dr. V.V. Ramaprasad Chairman, BOS Computer Science & Engineering	Member	
5. Dr. K. Ramani Chairman, BOS Information Technology	Member	
6. Dr. K. Delhi Babu chairman BOS, computer Science & Systems Engineering.	Member	
7. DR T. Deva Raju Chairman, BOS Electrical and Electronics Engineering	Member	

Members Present		Signature
8. Dr. M. Sarvanan Chairman, BOS Electronics and Instrumentation Engineering	Member	
9. Dr. A.V.M. Prasad Chairman BOS Basic Sciences and Humanities	Member	
10. Dr. R. Md. Shafi Chairman BOS Master of Computer Application	Member	
11. Sri. S. Hemachandra Chairman BOS Electronics and Control Engineering	Member	
12. Sri. G. Sreenivasulu Chairman, BOS Biotechnology	Member	
13. Prof. C. Madhusudhana Rao H.O.D., Computer Science and Engineering	Member	
14. Dr. T. Nageswara Prasad Professor & Head Dept. of Electrical and Electronics Engineering	Member	
15. Prof. P. Venkata Ramana Professor & Head Dept. of Electronics and Communication Engineering	Member	

Members Present		Signature
16. Prof. N. Gireesh Professor and Head Dept. of Electronics and Instrumentation Eng.	Member	
17. Dr. K. C. Varaprasad Professor and Head Dept. of Mechanical Engineering	Member	
18. Dr. P. Ramesh Professor and Head Dept. of Civil Engineering	Member	
19. Dr. P. Ramana Reddy Professor of EEE Dept. of EEE	Member	
20. Dr. A. Senguttuvan Professor of CSE Dept. of CSE	Member	- Not Attended -
21. Dr. N. Padmaja Professor of ECE Dept. of ECE	Member	
22. Dr. K. Sasadhi Controller of Examination	Member	

Members present		Signature
23. Sri B. Narendra Kumar Rao Head, Dept. of CSSE	Member	BNarendra
24. Sri Krishna G.V Giri Managing Director Asia Pacific - Health & public Services ACCENTURE	Member	– Not Attended
25 Sri Paturu Sumanth Managing Director ICOMM Tele Ltd. Hyderabad	Member	– Not Attended
26 Dr. C. Radha Krishna Former Director UGC-ASC, JNTU, Hyderabad	Member	CRKrishna
27. Dr. V. Ramgopal Rao Professor Dept. of Electrical Engineering IIT Bombay	Member	– Not Attended
28. Sri P. Vanamali Former principal Secretary Govt. of West Bengal	Member	
29. Prof. A. Ananda Rao Director Academic & planning JNTUA, Anantapuramu	Member University Nominee	

Members present		Signature
30. Prof. K. Rama Naidu Director of Evaluation JNTUA, Anantapuramu	Member University Nominee	27.5.15
31. Prof. B. Sasvesh professor of EEE JNTUA, Anantapuramu	Member University Nominee	-Not Attended-
32. Dr. C. Subhas Chairman BOS, ECE and Dean (Academic) SVEC.	Member Secretary	
33. Dr. M. Mohan Babu Chairman, SVET	Special Invitee	
34. Sri M. Vishnu Vardhan Babu CEO, SVET	Special Invitee	
35 Prof. T. Gopala Rao Special Officer, SVET	Special Invitee	
36. Sri B. Ravisekhar Director (Finance & Admin), SVET	Special Invitee	
37. Dr. I. Sudarsan Kumar Chief operating officer SVET	Special Invitee	27/5/2015

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

Sree Sainath Nagar, Tirupati – 517 102, A.P.

5th Meeting of the Academic Council held on 24th May, 2014
(as Autonomous College with effect from 2010-2011)

MINUTES

Members Present:

1.	Dr. P.C. Krishnamachary	Principal, SVEC	Chairman
2.	Dr. D.V.S. Bhagavanulu	Chairman, BOS Civil Engineering	Member
3.	Dr. D.V. Ramamurthy	Chairman, BOS Mechanical Engineering	Member
4.	Dr. V.V. Rama Prasad	Chairman, BOS Computer Science and Engineering	Member
5.	Dr. K. Ramani	Chairperson, BOS Information Technology	Member
6.	Prof. C. Madhusudhana Rao	Chairman, BOS Computer Science and Systems Engineering	Member
7.	Dr. T. Nageswara Prasad	Chairman, BOS Electrical and Electronics Engineering	Member
8.	Sri. M. Saravana	Chairman, BOS Electronics and Instrumentation Engineering	Member
9.	Sri S. Hema Chandra	Chairman, BOS Electronics and Control Engineering	Member
10.	Dr. T. Hariprasad	Chairman, BOS Biotechnology	Member
11.	Dr. A.V.M. Prasad	Chairman, BOS Basic Sciences & Humanities	Member
12.	Dr. R.Md. Shafi	Chairman, BOS Master of Computer Applications	Member
13.	Dr. T. Deva Raju	HOD, Electrical and Electronics Engineering	Member
14.	Prof. P.V. Ramana	HOD, Electronics and Communication Engineering	Member
15.	Prof. N. Gireesh	HOD, Electronics and Instrumentation Engineering	Member
16.	Dr. K.C. Varaprasad	HOD, Mechanical Engineering	Member
17.	Dr. P. Ramesh	HOD, Civil Engineering	Member
18.	Sri G. Sreeenivasulu	HOD, Biotechnology	Member
19.	Dr. P. Ramana Reddy	Professor of EEE	Member
20.	Prof. J.V.R. Vithal	Professor of EEE	Member
21.	Dr. K. Delhi Babu	Professor of CSE Dept. & PAT Officer	Member
22.	Dr. K. Saradhi	Controller of Examinations	Member
23.	Sri Paturu Sumanth	Managing Director, ICOMM Tele LTD, Hyderabad	Member
24.	Dr. V. Ramgopal Rao	Professor, Dept. of Electrical Engineering, IIT Bombay	Member
25.	Sri P. Vanamali	Former Principal Secretary, Govt. of West Bengal	Special Invitee
26.	Prof. K.B. Chandra Sekhar	Director, R&D, JNTUA, Anantapur	Member
27.	Prof. K. Hemachandra Reddy	Registrar, JNTUA, Anantapur	Member
28.	Prof. B. Sarvesh	Professor of EEE Department, JNTUACE, Aanantapur	Member
29.	Dr. C. Subhas	Chairman, BOS, ECE & Dean (Academics)	Member Secretary

Sri Krishna G.V. Giri, Dr. C. Radha Krishna, Sri M. Raghuveer and Dr. D. Janaki Ram could not attend the meeting.

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

1.0 Action Taken Report on Minutes of Academic Council Meeting held on 08-06-2013

Principal apprised the members that the 4th meeting of the Academic Council was held on 08-06-2013 and presented the action taken in accordance with the resolutions/ suggestions made,

- ✓ Meetings of Boards of Studies were convened
- ✓ Academic Regulations were implemented
- ✓ First batch of B.Tech graduated in 2013-14.

Members resolved that the above Action Taken Report be recorded.

2.0 Report of the Principal

Members congratulated the Management and the Principal for student admissions made for almost all the sanctioned intake in Diploma, B. Tech, M. Tech and MCA courses for the academic year 2013-2014.

Members appreciated the arrangements made for conducting/organizing various student activities – curricular, co-curricular and extra-curricular activities - and suggested that the same efforts may be continued.

3.0 Student Support

Members have taken note of the existing financial support and assistance to the students through:

- Tuition Fee reimbursement from Welfare Departments
- Fee Concessions and Financial Support by the Trust
- GATE Fellowships
- TEQIP-II Teaching Assistantships

Members congratulated the College Management and the Principal on their approach in implementing student training programmes. They also appreciated the efforts made for bringing Industry and Corporate to the campus and providing placements to the students of 2014 passed out batch. The members advised that the same spirit may be continued for improving students' placements.

4.0 Faculty Support

Resolved that the existing encouragement / support / incentives to the faculty members may be continued for:

- Publishing Technical Books
- Publishing Research Papers in Journals
- Receiving Research funding
- Results achieved in the subject(s) taught
- Improving Academic Qualifications
- Attending Faculty Development Programs/Seminars/Workshops/ Refresher Courses

5.0 Research

The members placed on record with appreciation the efforts of the Management and the Principal for carrying out research activities in the Research Laboratories established in the College through :

- National MEMS Design Centre (NMDC)
- Atmospheric Research Laboratory
- Research Advisory Committees

The members expressed their happiness over the efforts of the Management and the Principal in getting Research funding/AICTE grants-in-aid and for submitting proposals which are under active consideration.

6.0 AICTE Grants

While congratulating the College authorities, the members noted with satisfaction the grants sanctioned by AICTE during 2013-14 for implementing various schemes in the College.

Further, they also noted the proposals submitted by the College to AICTE for grants under relevant schemes.

7.0 Gold Medals

The members congratulated the students who were awarded gold medals for their academic excellence and congratulated the College authorities on their efforts in this direction.

8.0 TEQIP - II

The members expressed their satisfaction on the progress in implementing TEQIP-II activities under sub-component 1.1: Strengthening Institutions to improve Learning outcomes and employability of Graduates.

9.0 Proposals

The members noted the proposals submitted by the College to AICTE for seeking extension of approval for the existing programmes and to NBA for Accreditation/Reaccreditation of UG/PG Programs.

Stakeholders' feedback analysis reports of academic year 2013-14 are perused by the members. Feedback reports and action taken reports of academic years 2012-13 & 2013-14 are perused and relevant inputs are recommended for implementation in SVEC14 regulations.

The members perused and recommended implementation of the list of value-added courses in the next academic year (2014-15).

10.0 Recommendations of Boards of Studies convened during 25th - 26th April, 2014.

After perusal, the members approved the recommendations of Boards of Studies at the meetings convened on 25th & 26th April, 2014.

The members resolved to approve the Panels of Experts finalized by the Scrutiny Committee and to authorize the Chairman, Academic Council to select experts outside the panels, if necessary.

11.0 Nomination of Experts on Boards of Studies for 2014-2016.

The members resolved to approve the list of experts from academia, industry and alumni on Boards of Studies for the period 2014-2016. They also authorized the Chairman, Academic Council to nominate experts from the approved list of experts.

12.0 Academic Calendars for 2013–2014

The members approved the academic calendars for II, III & IV year B.Tech and II & III year MCA for the year 2014-2015.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

They also authorized the Chairman, Academic Council to implement the academic calendars for M.Tech, I year MCA and I year B.Tech as and when they are finalized after completion of the admission process for these courses.

13.0 Suggestions

The Hon'ble members of the Academic Council appreciated the measures initiated by the College since the last meeting of the Academic Council to improve the academic standards of the College. They expressed their happiness over the progress in research and other developmental activities.

The following suggestions were made by the Hon'ble members of the Academic Council:

- To link incentives with impact factor of the research journal in which the members of faculty publish their research papers. More incentives may also be considered for research publications in journals with higher impact factor.
- To consider quality and not the number while assessing conference presentations and research publications of teachers.
- To seek the Research Mentoring Committee guidance for more inputs in research, in-depth analysis of research publications, and networking with leading Institutions.
- To identify the research areas critically which are little explored and where possibility of funding is more.
- To explore the possibilities of networking with premier institutions to apply for research funding through national schemes.
- To formulate guidelines for academic flexibility (relaxation in workload) for teachers holding Ph.D. and pursuing research.
- To take steps to motivate every teacher with Ph.D qualification to publish papers in reputed and referred journals with good impact factor.
- To take steps to bring more industries to the campus both for placements and for Institutions-Industry-Interaction.

- To enable the teachers to have more industry exposure so that they can improve their teaching/research skills.
- To explore the possibility of considering credits upto II B.Tech – II semester and III B.Tech - II semester for promotion of students to III and IV B.Tech respectively.
- To make mandatory courses as non credit courses to avoid unnecessary legal problems that may arise due to not considering marks obtained in such courses for overall percentage of marks.
- To expedite the publication of results by ensuring speedy valuation of answer scripts.

The Hon'ble members resolved to authorize the Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College to effect necessary changes/modifications in the Academic Regulations / Syllabi / Evaluation procedures and Results wherever deemed necessary and report the same to the Academic Council at its immediate next meeting for ratification.

The Chairman, Academic Council and Principal, Sree Vidyanikethan Engineering College profusely thanked the members for their support and guidance.

(Dr. C. SUBHAS)
Member Secretary

P.C.K.Chary 24/05/2014
(Dr.P.C.KRISHNAMACHARY)
Chairman, Academic Council & Principal

SREE VIDYANIKETHAN ENGG. COLLEGE ★ TIRUPATI ★

P.C.K.Chary
PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Minutes of the FIFTH Meeting of Academic Council of Sree Vidyanikethan Engineering college (As Autonomous college with effect from 2010-2011) held on 24th MAY 2014 at 10:30 AM. in the Conference Hall.

	Members present		Signature
1.	Dr. P.C. Krishnamachary, Principal, SVEC	Chairman	P.C.K. 24/5/2014
2.	Dr. D.V.S. Bhagavanulu, chairman, BoS Civil Engineering	Member	D.V.S.B.
3.	Dr. D.V. Ramamurthy, Chairman, BoS Mechanical Engineering	Member	D.V.R.
4.	Dr. V.V. Rama prasad, chairman, BoS Computer Science & Engineering	Member	V.V.R.
5.	Dr. K. Ramani, chairman, BoS Information Technology	Member	K. Ra...
6.	Prof. C. Madhusudhana Rao, chairman, BoS Computer Science & System Engineering	Member	C.M.R.

Members present		Signature
7. Dr. T. Nageswara Prasad Chairman BoS Electrical & Electronics Engineering	Member	
8. Sri M. Saravanan Chairman BoS Electronics & Instrumentation Engineering	Member	
9. Sri. S. Hema Chandra Chairman BoS Electronics & Controller Engineering	Member	
10. Dr. T. Haripraasad Chairman BoS Biotechnology	Member	
11. Dr. A.V.M. Prasad Chairman BoS Basics Sciences & Humanities	Member	
12. Dr. R. Md. Shafi Chairman BoS Master of Computer Applications	Member	
13. Dr. T. Deva Raju HOD, Electrical & Electronics Engineering	Member	

Members present		Signature
14. Prof. P.V. Ramana HOD, Electronics & Communication Engineering	Member	
15. Prof. N. Gireesh HOD, Electronics & Instrumentation Engineering	Member	
16. Dr. K.C. Varaprasad HOD, Mechanical Engineering	Member	
17. Dr. P. Ramesh HOD, Civil Engineering	Member	
18. Sri. G. Srinivasulu HOD Biotechnology	Member	
19. Dr. P. Ramana Reddy Professor Department of EEE	Member	P.R.
20. Prof. J.V.R. Vithal Professor Department of EEE	Member	

Members present		Signature
21. Dr. K. Delhi Babu Professor of CSE Department & PAT Officers	Member	
22. Dr. K. Saradhi Controller of Examinations	Member	
23. Sri Krishna G.V Giri Managing Director, Asia Pacific - Health & Public Service, Accenture	Member	Not attended
24. Sri Paturu Sumanth Managing Director ICOMM Tele LTD, Hyderabad	Member	
25. Dr. C. Radha Krishna Former Director. UGC-ASC, JNTU	Member	Not attended
26. Dr. V. Rangopal Rao Professor Department of Electrical Engineering IIT Bombay	Member	

Members present		Signature
27. Sri P. Vanamali Former Principal Secretary, Govt. of West Bengal	Member	
28. Sri M. Raghuveer Executive Chairman Bambino Agro Industries Ltd., Hyderabad	Member	
29. Dr. D. Janaki Ram professor of CSE, IIT Madras	Member	
30. Prof. K. B. Chandra Sekhar Director, R&D JNTUA, Anantapur	Member	
31. Prof. K. Hemachandra Reddy Registrar, JNTUA, Anantapur	Member	
32. Prof. B. Sarvesh Professor of EEE Department JNTUACE, Anantapur	Member	
33. Dr. C. Subhas Chairman, BoS, ECE & Dean (Academics)	Member Secretary	

Members present		Signature
34. Dr. M. Mohan Babu Chairman, SVET	Special Invitee	
35. Sri M. Vishnu Vardhan Babu CEO, SVET	Special Invitee	
36. Prof. T. Gopala Rao Special officer SVET	Special Invitee	
37. Sri. B. Ravisekhar Director (Finance & Admin) SVET	Special Invitee	
38. Dr. I. Sudarsan Kumar Chief operating officer. SVET	Special Invitee	

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

Sree Sainath Nagar, Tirupati – 517 102, A.P.

4th Meeting of the Academic Council held on 8th June, 2013
(as Autonomous College with effect from 2010-2011)

MINUTES

Members Present:

1.	Dr. P.C. Krishnamachary	Principal, SVEC	Chairman
2.	Dr. V.V.Rama Prasad	Head, Dept. of Information Technology, SVEC	Member
3.	Prof. P.V. Ramana	Head, Dept. of Electronics and Communication Engineering, SVEC	Member
4.	Prof. C. Madhusudhana Rao	Head, Dept. of Computer Science & Systems Engineering, SVEC	Member
5.	Prof. N. Gireesh	Head, Dept. of Electronics and Instrumentation Engineering, SVEC	Member
6.	Sri S. Hema Chandra	Head, Dept. of Electronics and Control Engineering, SVEC	Member
7.	Sri O. Eswara Reddy	Head, Dept. of Civil Engineering, SVEC	Member
8.	Dr. K.C. Varaprasad	Head, Dept. of Mechanical Engineering, SVEC	Member
9.	Dr. T. Hari Prasad	Head, Dept. of Biotechnology, SVEC	Member
10.	Dr. R.Md. Shafi	Head, Dept. of Master of Computer Applications, SVEC	Member
11.	Dr. A.V.M. Prasad	Head, Dept. of General Engineering, Basic Sciences & Humanities, SVEC	Member
12.	Dr. P. Ramana Reddy	Professor of EEE & Dean (PG Courses), SVEC	Member
13.	Dr. G.S. Krishna Murthy	Professor of Civil Engineering, SVEC	Member
14.	Dr. K. Delhi Babu	Professor of CSE Dept. & PAT Officer, SVEC	Member
15.	Dr. K. Saradhi	Controller of Examinations, SVEC	Member
16.	Dr. C. Radha Krishna	Former Director, UGC-ASC, JNTU	Member
17.	Prof. B. Sarvesh	Professor & Head of EEE Department, JNTUACE, Aanantapur	Member
18.	Dr. C. Subhas	Professor of ECE & Dean (Academics), SVEC	Member Secretary

Dr. A. Senguttuvan, Dr. T. Deva Raju, Sri Paturu Sumanth, Sri M. Raghuveer, Dr. D. Janaki Ram, Sri Krishna G.V. Giri, Dr. V. Ramgopal Rao, Sri P. Vanamali, Prof. K.B. Chandra Sekhar and Prof. K. Hemachandra Reddy could not attend the meeting.

1.0 Action Taken Report on Minutes of Academic Council Meeting held on 02-06-2012

Principal apprised the members that the 3rd meeting of the Academic Council was held on 02-06-2012 and presented the action taken in accordance with the resolutions/ suggestions made,

- ✓ Meetings of Boards of Studies were convened
- ✓ Academic Regulations were implemented
- ✓ Scheme of Instruction and Syllabi for III Year B.Tech, III Year MCA, & II M.Tech (CNIS & CMS) were adopted.

Members resolved that the above Action Taken Report be recorded.

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

SREE VIDYANIKETHAN ENGG. COLLEGE * TIRUPATI *

2.0 Report of the Principal

Members congratulated the Management and the Principal in achieving admissions made for almost all the sanctioned intake in B. Tech, M. Tech and MCA courses for the academic year 2012- 2013.

Members appreciated the arrangements made for conducting/ organizing various student activities and approved the continuance of the same.

3.0 Student Support

Members have taken note of the existing financial support to the students through:

- Tuition Fee reimbursement from Welfare Departments
- Fee Concessions and Financial Support by the Trust
- GATE Fellowships
- TEQIP-II Teaching Assistantships

Members congratulated the College Management and the Principal for the student support training programmes, EDC Activities and for bringing Multinational Companies to the campus and providing placement to the students of 2013 passed out batch despite recession in the economy. The members approved the continuance of the same.

4.0 Faculty Support

Resolved that the existing encouragement/ support to the faculty members shall be continued for:

- Publishing Technical Books
- Publishing Research Papers in Journals
- Results achieved in the subject(s) taught
- Improving Academic Qualifications
- Attending Faculty Development Programs/ Seminars/ Workshops/ Refresher Courses

5.0 Research Activities

The members appreciated the efforts of the Management and the Principal for vibrant activities carried out in the following Research Laboratories and that carried out by Committees/ Clusters:

- National MEMS Design Centre (NMDC)
- Atmospheric Research Laboratory
- Research Advisory Committees
- Research Clusters

The members congratulated the Management and the Principal for getting the Research funding/ AICTE grants-in-aid and other proposals which are under active consideration. There was special appreciation by the members for sanction of DST-FIST program to strengthen the research infrastructure.

Also the members appreciated the faculty of EEE and ECE for getting the permission for Research Centers by JNTUA for Ph.D. programmes. Resolved that such research efforts shall be continued.

6.0 Gold Medals

The members congratulated the achievements of Students, and efforts of Principal and Faculty members for securing 3 Gold Medals of JNTUA, Anantapur for 2008-2012 batch.

The members appreciated institution of Endowment Gold Medals by the Trust to the Class Topper of each branch and TCS Gold Medal for the college topper.

7.0 Proposals submitted to AICTE and NAAC

Members observed that the proposals approved by the Governing Body were submitted to AICTE and are in line with the Vision of the Management. Members noted that AICTE, New Delhi accorded approval for all the proposals.

There was special appreciation by the members for accreditation of the college by NAAC with 'A' grade.

Members have perused the stakeholders' feedback reports and recommended to implement the feedback in the next revision of the curriculum.

Members have perused the list of value-added courses and recommended to implement in the next academic year (2013-14).

8.0 TEQIP - II

The members have taken note of the progress made in implementation of TEQIP-II, under sub-component 1.1: Strengthening Institutions to improve Learning outcomes and employability of Graduates, in terms of Faculty Development Programmes attended/ organized, Teaching Assistantship to the students, Industry Institute Interaction and Student Development Activities.

9.0 Recommendations of Boards of Studies convened during 15th - 30th April, 2013.

(i) Revision of Syllabi and Regulations of UG and PG programmes with effect from 2014-'15.

(ii) Procedure for evaluation of audit courses of B. Tech. and MCA programmes.

SREE VIDYANIKETHAN ENGG. COLLEGE ★ TIRUPATI ★

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

(iii) The procedure to be recommended to JNTUA, Anantapur in case of the inter-autonomous college transfer.

The members have approved the above recommendations.

10.0 Panels of Examiners

Chairmen of respective Board of Studies have submitted the Panels of paper setters for the following courses to the committee for scrutiny and suggestions.

III B. Tech : I & II Semesters of Mechanical Engineering.

IV B. Tech : I & II Semesters of the remaining Programmes.

Resolved to approve these Panels of Experts finalized by the scrutiny committee and also to authorize the Principal to select experts outside the panels, if necessary.

11.0 Academic Calendars for 2013–2014

Resolved to approve Academic Calendars prepared for II, III & IV years of B.Tech and II and III years of MCA Programmes for the academic year 2013- 2014. Also resolved to authorize the Chairman (AC) to approve the academic calendars for I year B. Tech., I year MCA and I & II year M. Tech. programmes that can be prepared only after announcement of admission dates.

12.0 Nomination of Experts on Boards of Studies for 2014– 2016

Academic Council resolved to approve extending the tenure of the existing Experts on the Board of Studies in Mechanical Engineering for a further period of two years commencing from the academic year 2014- '15.

13.0 Granting concessions and facilities to the Physically challenged students

The Academic Council recommended to implement the proceedings of the JNTUA, Anantapur in this regard in our College under autonomous status subject to the ratification by the Governing Body.

14.0 Suggestions

The Hon'ble members of the Academic Council appreciated the measures initiated by the College since the last meeting of the Academic Council to improve the academic excellence of the College. They expressed their happiness over the progress in research and other developmental activities.

The following suggestions were made by the Hon'ble members of the Academic Council:

- To enhance the activities through Institution-Industry interaction.

- To integrate creativity in teaching-learning process and the BOS should provide space for creativity in the syllabi.
- To seek expert advice from eminent academicians/researchers while seeking major changes in the syllabi vis-a-vis industry needs.
- To maintain a register for students and members of faculty who make use of NPTEL facilities.
- To arrange expert lectures while celebrating Teachers' Day/Women's Day/Engineers Day and other such occasions and document the proceedings through a News Letter.
- To provide details of salary structure (pay package) of students selected for placements in industries.
- To furnish data about the students who have become successful entrepreneurs after getting trained at the Entrepreneurship Development Cell of the College.
- To augment the research facilities available in the College for the benefit of research scholars admitted in the Research Centres of the College.
- To encourage faculty and students publish papers based on all M.Tech projects in reputed journals.
- To organize seminars/workshops on 'Corporate Governance', 'Professional Engineering Ethics' and 'Intellectual Property Rights' with financial support from TEQIP-II funds.
- To enhance knowledge capital of the Institution and explore possibilities of finding metrics for assessment.
- The Department of EEE may explore the possibility of providing an audit course on 'Power Quality Auditing'.
- To include comprehensive viva-voce in assessment so that the students may get the necessary experience of facing interviews.
- To make 'Professional Ethics' as a compulsory subject for students of all branches in Engineering.

The 4th Meeting of the Academic Council concluded with thanks to the Members.

SREE VIDYANIKETHAN ENGG. COLLEGE ★ TIRUPATI ★

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

(Dr. C. SUBHAS)
Member Secretary

(Dr.P.C.KRISHNAMACHARY)
Chairman, Academic Council

Minutes of the FOURTH Meeting of Academic Council of Sree Vidyanikethan Engineering College (As Autonomous College with effect from 2010-2011) held on 08th JUNE 2013 at 10:30 A.M., in the Conference Hall.

Members Present		Signature
1. Dr. P. C. Krishnamachary Principal	Chairman	
2. Dr. V. V. Rama Prasad Professor & Head Dept. of I. T	Member	
3. Dr. A. Senguttuvan Professor & Head Dept. of C S E	Member	
4. Dr. T. Deva Raju Professor & Head Dept. of E E E	Member	
5. Prof. P. Venkataramana Professor & Head Dept. of E C E	Member	
6. Prof. C. Madhusudhana Rao Professor & Head Dept. of C S E	Member	

Members Present		Signature
7. Prof. N. Giresh Professor & Head Dept. of EIE	Member	
8. Sri S. Hemachandra Associate Professor & Head I/c Dept. of Econ E	Member	
9. Sri O. Eswara Reddy Associate Professor & Head I/c Dept. of Civil Engineering	Member	
10. Dr. K. C. Valaprasad Professor & Head Dept. of Mechanical Engineering	Member	
11. Dr. T. Hari Prasad Professor & Head Dept. of Biotechnology	Member	
12. Dr. R. Md. Shabi Professor & Head Dept. of MCA	Member	
13. Dr. A.V.M. Prasad Associate Professor & Head I/c Dept. of G E B H	Member	
14. Dr. P. Ramana Reddy Dean P. G. Courses Dept. of EEE	Member	
15. Dr. K. Saradhi Controller of Examinations SVEC	Member	

Members Present		Signature
15. DR. G. S. Krishna Murthy Professor, Dept. of Civil Engineering	Member	
16. DR. K. Delhi Babu Professor & PAT officer Dept. of CSE	Member	
17. Sri Krishna G.V. Giri Managing Director Asia Pacific - Health & Public Services ACCENTURE	Member	Not Attended
18. Sri Patulu Sumanth Managing Director ICOMM Tele Ltd, Hyderabad	Member	Not Attended
19. DR. C. Radha Krishna Former Director UGC-ASC, JNTU, Hyderabad	Member	CRrishna 08/6/13
20. DR. V. Rangopal Rao Professor, Dept. of Electrical Engg IIT, Bombay	Member	Not Attended
21. Sri P. Vanamali Former Principal Secretary Govt. of West Bengal	Member	Not Attended
22. Sri M. Raghuveer Executive Chairman Bambino Agro Industries Ltd. Hyderabad	Member	Not Attended

	Members Present		Signature
23.	DR. D. Janaki Ram Professor of CSE IIT, Madras	Member	Not Attended
24.	Prof. K. B. Chandra Sekhar Director, R & D JNTUA, Anantapur	Member	Not Attended
25.	Prof. K. Hemachandra Reddy Registrar JNTUA, Anantapur	Member	Not Attended
26.	Prof. B. Sarvesh Professor ~~& Head~~ Dept. of EEE JNTUACE, Anantapur	Member	8.6.13
27.	DR. C. Subhas Dean (Academic)	Member Secretary	
28.	Padma Shri DR. M. Mohan Babu Chairman, SVET	Special Invitee	
29.	Prof. T. Gopala Rao Special officer, SVET	Special Invitee	
30.	Sri B. Ravisekhar Director (Finance & Admin.) SVET	Special Invitee	

Members Present		Signature
31. DR. D.V.S. BHAGAVANULU Director, SVEC	Special Invitee	
32. DR. I. SUDARSAN KUMAR Chief Operating officer, SVEC	Special Invitee	

(v) List of broad classification of courses based on local, regional, national and global needs with sample courses indicated on a typical course structure of 2016 regulations.

Catering to Local, Regional, National and Global needs

The institution while planning for attaining the program educational objectives - student progression to higher education; gainful placement and endeavors in entrepreneurship, attempted to design the curriculum and formulated teaching methods to emphasize relevance and problem-solving approach to Engineering. Also the curriculum update is made to more effectively innovate and apply engineering and technology to local, regional, national and global issues besides cross cutting challenges such as safe environment, sustainable development, climate change and poverty alleviation.

Local and regional needs:

Environmental Studies, Environmental Pollution and Control, Air Pollution and Control, Solid Waste Management, Green Technologies, Energy Audit and Conservation. *Smart Grid Technology*, Disaster Mitigation and Management, *Rural Technologies* etc.

National needs:

Data Warehousing and Data Mining, *Big Data*, Software Testing, Mobile Application Development, Cloud Computing, Bioinformatics, Social Networks. Programming in C, OOPs through C++, *Python Programming*, OOPs through Java, Linux Programming, Web Programming/ Technologies. *Industrial Electronics*, Power Electronics, Nano Electronics, MEMS. System Design using Microcontrollers, Machine Tools and Modern Machining Process, Hydraulics and Pneumatics, Product Design, *Rapid Prototype Technology*, Geometric Modeling, Industrial Robotics. *Infrastructure Development and Management*, Rehabilitation and Retrofitting of Structures, Architecture and Town planning, Transportation Planning and Management, Structural Health Monitoring. *Entrepreneurship for Micro Small Medium Enterprises*, *Bio-Medical Instrumentation*. Computer Forensics, Information Security, *Cyber Security and Laws*, Ethical Hacking etc.

Global needs:

Internet of Things, *Intelligent Computing Systems*, Embedded Systems, Soft Computing, Machine Learning, High Performance Computing, Computer Vision, Industrial Robotics. Managerial Economics and Principles of Accountancy. *Quality Management and Reliability Engineering*, Industrial Engineering and Management, Power System Reliability. Green Technologies, Professional Ethics, *Intellectual Property Rights*, Global Strategy and Technology.

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

CIVIL ENGINEERING

I B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
I Year - I Semester										
1.	16BT1HS01	Technical English	3	1	-	4	3	30	70	100
2.	16BT1BS01	Engineering Chemistry	3	1	-	4	3	30	70	100
3.	16BT1BS03	Matrices and Numerical Methods	3	1	-	4	3	30	70	100
4.	16BT1BS04	Multi–Variable Calculus and Differential Equations	3	1	-	4	3	30	70	100
5.	16BT10501	Programming in C	3	1	-	4	3	30	70	100
6.	16BT1HS31	English Language Lab	-	-	3	3	2	50	50	100
7.	16BT1BS31	Engineering Chemistry Lab	-	-	3	3	2	50	50	100
8.	16BT10331	Computer Aided Engineering Drawing	-	1	6	7	3	50	50	100
9.	16BT10531	Programming in C Lab	-	-	3	3	2	50	50	100
Total			**15**	**6**	**15**	**36**	**24**	**350**	**550**	**900**

I B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
I Year - II Semester										
1.	16BT1BS02	Engineering Physics	3	1	-	4	3	30	70	100
2.	16BT2BS01	Transformation Techniques and Partial Differential Equations	3	1	-	4	3	30	70	100
3.	16BT20101	Building Materials and Construction Technology	3	1	-	4	3	30	70	100
4.	16BT20102	Engineering Mechanics	4	1	-	5	4	30	70	100
5.	16BT20241	Basic Electrical and Electronics Engineering	3	1	-	4	3	30	70	100
6.	16BT1BS32	Engineering Physics Lab	-	-	3	3	2	50	50	100
7.	16BT20131	Building Materials and Construction Technology Lab	-	-	3	3	2	50	50	100
8.	16BT20252	MATLAB Practice for Civil Engineers	-	1	3	4	2	50	50	100
9.	16BT20331	Engineering Workshop Practice	-	-	3	3	2	50	50	100
Total			**16**	**6**	**12**	**34**	**24**	**350**	**550**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

II B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
II Year - I Semester										
1.	16BT3BS01	Probability Distributions and Statistical Methods	3	1	-	4	3	30	70	100
2.	16BT3HS02	Managerial Economics and Principles of Accountancy	3	1	-	4	3	30	70	100
3.	16BT30101	Construction Planning and Project Management	3	1	-	4	3	30	70	100
4.	16BT30102	Fluid Mechanics and Hydraulic Machinery	3	1	-	4	3	30	70	100
5.	16BT30103	Mechanics of Solids	3	1	-	4	3	30	70	100
6.	16BT30104	Surveying	3	1	-	4	3	30	70	100
7.	16BT30131	Fluid Mechanics and Hydraulic Machinery Lab	-	-	3	3	2	50	50	100
8.	16BT30132	Strength of Materials Lab	-	-	3	3	2	50	50	100
9.	16BT30133	Surveying Lab	-	-	3	3	2	50	50	100
Total			**18**	**6**	**9**	**33**	**24**	**330**	**570**	**900**

II B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
II Year - II Semester										
1.	16BT3HS01	Environmental Studies	3	-	-	3	3	30	70	100
2.	16BT40101	Concrete Technology	3	1	-	4	3	30	70	100
3.	16BT40102	Engineering Geology	3	1	-	4	3	30	70	100
4.	16BT40103	Engineering Hydrology	3	1	-	4	3	30	70	100
5.	16BT40104	Structural Analysis-I	3	1	-	4	3	30	70	100
6.	16BT40105	Water Supply Engineering	3	1	-	4	3	30	70	100
7.	16BT40131	Concrete Technology Lab	-	-	3	3	2	50	50	100
8.	16BT40132	Engineering Geology Lab	-	-	3	3	2	50	50	100
9.	16BT4HS31	Soft Skills Lab	-	-	3	3	2	50	50	100
Total			**18**	**5**	**9**	**32**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (I Semester)

S. No.	Course Code	Course Title	Course Category Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
III Year - I Semester										
1.	16BT50101	Irrigation Engineering	3	1	-	4	3	30	70	100
2.	16BT50102	Reinforced Cement Concrete Structures	3	1	-	4	3	30	70	100
3.	16BT50103	Soil Mechanics	3	1	-	4	3	30	70	100
4.	16BT50104	Structural Analysis-II	3	1	-	4	3	30	70	100
5.	16BT50105	Wastewater Technology	3	1	-	4	3	30	70	100
6.		Interdisciplinary Elective-1	3	1	-	4	3	30	70	100
	16BT50441	1. Principles of Image Processing								
	16BT5HS01	2. Costing and Finance Management for Civil Engineers								
	16BT50241	3. Renewable Energy								
	16BT70308	4. Computational Fluid Dynamics								
7.	16BT50131	Computer Aided Building Planning and Drawing	-	1	3	4	2	50	50	100
8.	16BT50132	Environmental Engineering Lab	-	-	3	3	2	50	50	100
9.	16BT50133	Geotechnical Engineering Lab	-	-	3	3	2	50	50	100
Total			**18**	**7**	**9**	**34**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination		
								Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
III Year - II Semester										
1.	16BT60101	Foundation Engineering	3	1	-	4	3	30	70	100
2.	16BT60102	Highway and Traffic Engineering	3	1	-	4	3	30	70	100
3.	16BT60103	Steel Structures	3	1	-	4	3	30	70	100
4.	**Interdisciplinary Elective-2**		3	1	-	4	3	30	70	100
	16BT40502	1. Data Base Management Systems								
	16BT50341	2. Optimization Techniques								
	16BT60104	3. Fire Engineering								
	16BT60241	4. Energy Audit and Conservation								
5.	**Program Elective – 1**		3	1	-	4	3	30	70	100
	16BT60105	1. Advanced Reinforced Cement Concrete Structures								
	16BT60106	2. Advanced Structural Analysis								
	16BT60107	3. Advanced Surveying								
	16BT60108	4. Geoenvironmental Engineering								
	16BT60109	5. Groundwater Development and Management								
	16BT60110	6. Solid Waste Management								
	16BT60111	7. Structural Health Monitoring								
6.	**Open Elective**		3	1	-	4	3	30	70	100
7.	16BT60131	Computer Aided Design and Detailing Lab	-	-	3	3	2	50	50	100
8.	16BT60132	Highway Engineering Lab	-	-	3	3	2	50	50	100
9.	16BT60133	Seminar	-	-	-	-	2	-	100	100
10.	16BT6MOOC	MOOC	-	-	-	-	-	-	-	-
Total			**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

Open Electives: III B. Tech. – III semester (CE, ME, CSE, IT & CSSE)

IV B. Tech – I Semester (ECE, EEEE & EIE)

Sl. No.	Course Code	Open Elective Course Title	Sl. No.	Course Code	Open Elective Course Title
1.	16BT6HS01	Banking and Insurance	16.	16BT60114	Disaster Mitigation and Management
2.	16BT6HS02	Business Communication and Career Skills	17.	16BT60115	Environmental Pollution and Control
3.	16BT6HS03	Cost Accounting and Financial Management	18.	16BT60116	Planning for Sustainable Development
4.	16BT6HS04	Entrepreneurship for Micro, Small and Medium Enterprises	19.	16BT60117	Professional Ethics
5.	16BT6HS05	French Language	20.	16BT60118	Rural Technology
6.	16BT6HS06	German Language	21.	16BT60308	Global Strategy and Technology
7.	16BT6HS07	Indian Constitution	22.	16BT60309	Intellectual Property Rights and Management
8.	16BT6HS08	Indian Economy	23.	16BT60310	Managing Innovation and Entrepreneurship
9.	16BT6HS09	Indian Heritage and Culture	24.	16BT60311	Materials Science
10.	16BT6HS10	Indian History	25.	16BT70412	Green Technologies
11.	16BT6HS11	Personality Development	26.	16BT70413	Introduction to Nanoscience and Technology
12.	16BT6HS12	Philosophy of Education	27.	16BT60505	Engineering System Analysis and Design
13.	16BT6HS13	Public Administration	28.	16BT71011	Micro-Electro-Mechanical Systems
14.	16BT60112	Building Maintenance and Repair	29.	16BT61205	Cyber Security and Laws
15.	16BT60113	Contract Laws and Regulations	30.	16BT61505	Bio-informatics

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

IV B.Tech. (I Semester)

S. No.	Course Code	Course Title	Course Category Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
IV Year - I Semester										
1.	16BT70101	Estimation and Quantity Surveying	3	1	-	4	3	30	70	100
2.	16BT70102	Geospatial Technologies	3	1	-	4	3	30	70	100
3.	16BT70103	Railway, Airport and Harbour Engineering	3	1	-	4	3	30	70	100
4.		Program Elective – 2	3	1	-	4	3	30	70	100
5.	16BT70104 16BT70105 16BT70106 16BT70107 16BT70108 16BT70109 16BT70110	1. Advanced Foundation Engineering 2. Architecture and Town Planning 3. Environmental Impact Assessment and Management 4. Global Positioning System (GPS) 5. Structural Dynamics 6. Transportation Planning and Management 7. Water Resources Systems Planning and Management Program Elective – 3	3	1	-	4	3	30	70	100
6.	16BT70111 16BT70112 16BT70113 16BT70114 16BT70115 16BT70116 16BT70117	1. Advanced Steel Structures 2. Earthquake Resistant Design of Structures 3. Highway Construction and Maintenance 4. Industrial Wastewater Treatment 5. Infrastructure Development and Management 6. Soil Dynamics and Machine Foundations 7. Watershed Management Program Elective – 4	3	1	-	4	3	30	70	100
7.	16BT70118 16BT70119 16BT70120 16BT70121 16BT70122 16BT70123 16BT70124 16BT70131	1. Air Pollution and Control 2. Bridge Engineering 3. Ground Improvement Techniques 4. Hydro Power Engineering 5. Pavement Analysis and Design 6. Prestressed Concrete 7. Rehabilitation and Retrofitting of Structures Civil Engineering Software Lab	-	-	3	3	2	50	50	100
8.	16BT70132	Remote Sensing and Geographical Information Systems Lab	-	-	3	3	2	50	50	100
9.	16BT70133	Comprehensive Assessment	-	-	-	-	2	-	100	100
Total			**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

IV B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
IV Year - II Semester										
1.	16BT80131	Project Work*	-	-	-	-	12	100	100	200
		Total	-	-	-	-	**12**	**100**	**100**	**200**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

COMPUTER SCIENCE AND ENGINEERING

I B.Tech. (I Semester)

S. No	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	16BT1HS01	Technical English	3	1	-	4	3	30	70	100
2.	16BT1BS01	Engineering Chemistry	3	1	-	4	3	30	70	100
3.	16BT1BS03	Matrices and Numerical Methods	3	1	-	4	3	30	70	100
4.	16BT1BS04	Multi-variable calculus and Differential equations	3	1	-	4	3	30	70	100
5.	16BT10501	Programming in C	3	1	-	4	3	30	70	100
6.	16BT1HS31	English Language Lab	-	-	3	3	2	50	50	100
7.	16BT1BS31	Engineering Chemistry Lab	-	-	3	3	2	50	50	100
8.	16BT10331	Computer Aided Engineering Drawing	-	1	6	7	3	50	50	100
9.	16BT10531	Programming in C Lab	-	-	3	3	2	50	50	100
	Total		**15**	**6**	**15**	**36**	**24**	**350**	**550**	**900**

I B.Tech. (II Semester)

S. No	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	16BT1BS02	Engineering Physics	3	1	-	4	3	30	70	100
2.	16BT2BS01	Transformation Techniques and Partial Differential Equations	3	1	-	4	3	30	70	100
3.	16BT20441	Basic Electronic Devices and Circuits	3	1	-	4	3	30	70	100
4.	16BT21201	Object Oriented Programming through C++	4	1	-	5	4	30	70	100
5.	16BT21501	Digital Logic Design	3	1	-	4	3	30	70	100
6.	16BT1BS32	Engineering Physics Lab	-	-	3	3	2	50	50	100
7.	16BT20451	Analog and Digital Electronics Laboratory	-	-	3	3	2	50	50	100
8.	16BT20531	Workshop in Computer Science	-	-	3	3	2	50	50	100
9.	16BT21232	Object Oriented Programming Lab	-	-	3	3	2	50	50	100
	Total		**16**	**5**	**12**	**33**	**24**	**350**	**550**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

II B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	16BT3BS01	Probability Distributions and Statistical Methods	3	1	-	4	3	30	70	100
2.	16BT30501	Computer Organization	3	1	-	4	3	30	70	100
3.	16BT30502	Data Structures	3	1	-	4	3	30	70	100
4.	16BT31201	Discrete Mathematical Structures	3	1	-	4	3	30	70	100
5.	16BT30503	Python Programming	3	1	-	4	3	30	70	100
6.	16BT31501	Operating Systems	3	1	-	4	3	30	70	100
7.	16BT30531	Data Structures lab	-	-	3	3	2	50	50	100
8.	16BT30532	Python Programming lab	-	-	3	3	2	50	50	100
9.	16BT31531	Operating Systems Lab	-	-	3	3	2	50	50	100
Total			**18**	**6**	**9**	**33**	**24**	**330**	**570**	**900**

II B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	16BT3HS01	Environmental Studies	3	-	-	3	3	30	70	100
2.	16BT40501	Computer Graphics	3	1	-	4	3	30	70	100
3.	16BT40502	Database Management Systems	3	1	-	4	3	30	70	100
4.	16BT41201	Design and Analysis of Algorithms	3	1	-	4	3	30	70	100
5.	16BT41202	Java Programming	3	1	-	4	3	30	70	100
6.	16BT41203	Software Engineering	3	1	-	4	3	30	70	100
7.	16BT40531	Database Management Systems Lab	-	-	3	3	2	50	50	100
8.	16BT31231	Java Programming Lab	-	-	3	3	2	50	50	100
9.	16BT4HS31	Soft Skills Lab	-	-	3	3	2	50	50	100
Total			**18**	**5**	**9**	**32**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	16BT5HS01	Management Science	3	1	-	4	3	30	70	100
2.	16BT50501	Computer Networks	3	1	-	4	3	30	70	100
3.	16BT50502	Linux Programming	3	1	-	4	3	30	70	100
4.	16BT51202	Object Oriented Analysis and Design	3	1	-	4	3	30	70	100
5.	16BT41204	Theory of Computation	3	1	-	4	3	30	70	100
6.		**Interdisciplinary Elective-1**	3	1	-	4	3	30	70	100
	16BT50442	Micro Processors and Interfacing								
	16BT50503	Computer Vision								
	16BT50504	Data Communications								
	16BT51541	Modeling and Simulation								
7.	16BT50531	Computer Networks Lab	-	-	3	3	2	50	50	100
8.	16BT50532	Linux Programming Lab	-	-	3	3	2	50	50	100
9.	16BT50533	Object Oriented Analysis and Design Lab	-	-	3	3	2	50	50	100
	Total		**18**	**6**	**9**	**33**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (II Semester)

S. No	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	16BT3HS02	Managerial Economics and Principles of Accountancy	3	1	-	4	3	30	70	100
2.	16BT61501	Data Warehousing and Data Mining	3	1	-	4	3	30	70	100
3.	16BT60501	Software Testing	3	1	-	4	3	30	70	100
4.		**Inter Disciplinary Elective–2**	3	1	-	4	3	30	70	100
	16BT70402	Embedded Systems								
	16BT50341	Optimization Techniques								
	16BT60502	Soft Computing								
	16BT60503	Wireless Networks								
5.		**Program Elective–1**	3	1	-	4	3	30	70	100
	16BT71210	High Performance Computing								
	16BT71202	Mobile Application Development								
	16BT71204	Mobile Computing								
	16BT60504	Principles of Programming Languages								
6.		**Open Elective**	3	1	-	4	3	30	70	100
7.	16BT61531	Data Warehousing and Data Mining Lab	-	-	3	3	2	50	50	100
8.	16BT60531	Software Testing Lab	-	-	3	3	2	50	50	100
9.	16BT60532	Seminar		-	-	-	2	-	100	100
10.	16BT6MOOC	MOOC	-	-	-	-	-	-	-	-
	Total		**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

IV B.Tech. (I Semester)

S. No	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	16BT61201	Cloud Computing	3	1	-	4	3	30	70	100
2.	16BT51501	Compiler Design	3	1	-	4	3	30	70	100
3.	16BT51203	Web Technologies	3	1	-	4	3	30	70	100
4.	**Program Elective–2**		3	1	-	4	3	30	70	100
	16BT70501	Big Data Analytics								
	16BT71205	Cryptography and Network Security								
	16BT70502	Ethical Hacking								
	16BT61503	Software Project Management								
5.	**Program Elective–3**		3	1	-	4	3	30	70	100
	16BT70503	Computer Forensics								
	16BT70504	Design Patterns								
	16BT71508	Internet of Things								
	16BT71208	Service Oriented Architecture								
6.	**Program Elective–4**		3	1	-	4	3	30	70	100
	16BT70505	Human Computer Interaction								
	16BT71203	Information Retrieval Systems								
	16BT70506	Multimedia Application Development								
	16BT61204	Semantic Web								
7.	16BT61231	Cloud Computing Lab	-	-	3	3	2	50	50	100
8.	16BT51233	Web Technologies Lab	-	-	3	3	2	50	50	100
9.	16BT70531	Comprehensive Assessment	-	-	-	-	2	-	100	100
	Total		**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

IV B.Tech. (II Semester)

S. No.	Course Code	Course Title	L	T	P	Contact Periods/ Week	Credits (C)	Scheme of Examination Max. Marks		
								Int. Marks	Ext. Marks	Total Marks
1.	16BT80531	Project Work*	-	-	-	-	12	100	100	200
	Total		**-**	**-**	**-**	**-**	**12**	**100**	**100**	**200**

*Full-time project work

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

MECHANICAL ENGINEERING

I B.Tech. (I Semester)

Course code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
		L	T	P	Total		Internal Marks	External Marks	Total Marks
16BT1HS01	Technical English	3	1	0	4	3	30	70	100
16BT1BS01	Engineering Chemistry	3	1	0	4	3	30	70	100
16BT1BS03	Matrices and Numerical Methods	3	1	0	4	3	30	70	100
16BT1BS04	Multi-Variable Calculus and Differential Equations	3	1	0	4	3	30	70	100
16BT10501	Programming in C	3	1	0	4	3	30	70	100
16BT1HS31	English Language Lab	0	0	3	3	2	50	50	100
16BT1BS31	Engineering Chemistry Lab	0	0	3	3	2	50	50	100
16BT10331	Computer Aided Engineering Drawing	0	1	6	7	3	50	50	100
16BT10531	Programming in C Lab	0	0	3	3	2	50	50	100
Total		**15**	**6**	**15**	**36**	**24**	**350**	**550**	**900**

I B.Tech. (II Semester)

Sl. No.	Course code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT1BS02	Engineering Physics	3	1	0	4	3	30	70	100
2	16BT2BS01	Transformation Techniques and Partial Differential Equations	3	1	0	4	3	30	70	100
3	16BT20102	Engineering Mechanics	4	1	0	5	4	30	70	100
4	16BT20241	Basic Electrical and Electronics Engineering	3	1	0	4	3	30	70	100
5	16BT20301	Engineering Materials	3	1	0	4	3	30	70	100
6	16BT1BS32	Engineering Physics Lab	0	0	3	3	2	50	50	100
7	16BT20251	Electrical and Electronics Engineering Lab	0	0	3	3	2	50	50	100
8	16BT20331	Engineering Workshop Practice	0	0	3	3	2	50	50	100
9	16BT20332	Materials Science Lab	0	0	3	3	2	50	50	100
	Total		**16**	**5**	**12**	**33**	**24**	**350**	**550**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

II B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT3BS01	Probability Distributions and Statistical Methods	3	1	-	4	3	30	70	100
2	16BT30301	Engineering Metallurgy	3	1	-	4	3	30	70	100
3	16BT30302	Kinematics of Machinery	3	1	-	4	3	30	70	100
4	16BT30303	Manufacturing Technology	3	1	-	4	3	30	70	100
5	16BT30304	Strength of Materials	3	1	-	4	3	30	70	100
6	16BT30305	Thermodynamics	3	1	-	4	3	30	70	100
7	16BT30331	Computer Aided Machine Drawing Lab	-	-	3	3	2	50	50	100
8	16BT30332	Manufacturing Technology Lab	-	-	3	3	2	50	50	100
9	16BT30132	Strength of Materials Lab	-	-	3	3	2	50	50	100
Total			**18**	**6**	**9**	**33**	**24**	**330**	**570**	**900**

II B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT3HS01	Environmental Studies	3	-	-	3	3	30	70	100
2	16BT40301	Design of Machine Elements – I	3	1	-	4	3	30	70	100
3	16BT40302	Dynamics of Machinery	3	1	-	4	3	30	70	100
4	16BT40303	Fluid Mechanics	3	1	-	4	3	30	70	100
5	16BT40304	Machine tools and Modern Machining Processes	3	1	-	4	3	30	70	100
6	16BT40305	Thermal Engineering - I	3	1	-	4	3	30	70	100
7	16BT40331	Fluid Mechanics Lab	-	-	3	3	2	50	50	100
8	16BT40332	Machine Tools Lab	-	-	3	3	2	50	50	100
9	16BT4HS31	Soft Skills Lab	-	-	3	3	2	50	50	100
Total			**18**	**5**	**9**	**32**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination		
								Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT50301	Design of Machine Elements –II	3	1	-	4	3	30	70	100
2	16BT50302	Industrial Engineering and Management	3	1	-	4	3	30	70	100
3	16BT50303	Metrology and Measurements	3	1	-	4	3	30	70	100
4	16BT50304	Refrigeration and Air – conditioning	3	1	-	4	3	30	70	100
5	16BT50305	Thermal Engineering - II	3	1	-	4	3	30	70	100
6		Interdisciplinary Elective-1	3	1	-	4	3	30	70	100
	16BT50306	Human Resources Management								
	16BT50307	Instrumentation and Control Systems								
	16BT50308	Mechatronics								
	16BT40502	Database Management System								
7	16BT50331	Dynamics and Vibrations Lab	-	-	3	3	2	50	50	100
8	16BT50332	Internal Combustion Engines Lab	-	-	3	3	2	50	50	100
9	16BT50333	Metrology and Instrumentation Lab	-	-	3	3	2	50	50	100
Total			**18**	**6**	**9**	**33**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination		
								Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT3HS02	Managerial Economics and Principles of Accountancy	3	1	-	4	3	30	70	100
2	16BT60301	CAD/CAM	3	1	-	4	3	30	70	100
3	16BT60302	Heat Transfer	3	1	-	4	3	30	70	100
4		Interdisciplinary Elective-2	3	1	-	4	3	30	70	100
	16BT60303	Non-Conventional Energy Sources								
	16BT50402	Microprocessors and Microcontrollers								
	16BT41202	Java programming								
	16BT51201	Computer Graphics and Multimedia								
5		Program Elective– 1	3	1	-	4	3	30	70	100
	16BT60304	Gas Turbines and Jet Propulsion								
	16BT60305	Hydraulics and Pneumatics								
	16BT60306	Mechanical Vibrations								
	16BT60307	Supply Chain Management								
6		Open Elective	3	1	-	4	3	30	70	100
7	16BT60331	CAD and Simulation Lab	-	-	3	3	2	50	50	100
8	16BT60332	Heat Transfer Lab	-	-	3	3	2	50	50	100
9	16BT60333	Seminar	-	-	-	-	2	-	100	100
10	16BT6MOOC	MOOC	-	-	-	-	-	-	-	-
Total			**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

IV B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT70301	Automobile Engineering	3	1	-	4	3	30	70	100
2	16BT70302	Finite Element Method	3	1	-	4	3	30	70	100
3	16BT70303	Operations Research	3	1	-	4	3	30	70	100
4		Program Elective–2	3	1	-	4	3	30	70	100
	16BT70304	Cryogenics								
	16BT70305	Geometric Modeling								
	16BT70306	Quality Management and Reliability Engineering								
	16BT70307	Tool design								
5		Program Elective–3	3	1	-	4	3	30	70	100
	16BT70308	Computational Fluid Dynamics								
	16BT70309	Industrial Robotics								
	16BT70310	Product Design								
	16BT70311	Production and Operations Management								
6		Program Elective–4	3	1	-	4	3	30	70	100
	16BT70312	Power Plant Engineering								
	16BT70313	Project Management								
	16BT70314	Rapid Prototype Technology								
	16BT70315	Tribology								
7	16BT70331	Computer Aided Manufacturing and Automation Lab	-	-	3	3	2	50	50	100
8	16BT70332	Industrial Engineering Lab	-	-	3	3	2	50	50	100
9	16BT70333	Comprehensive Assessment	-	-	-	-	2	-	100	100
Total			**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

IV B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
1	16BT80331	Project Work*	-	-	-	-	12	100	100	200
	Total		**-**	**-**	**-**	**-**	**12**	**100**	**100**	**200**

*Full-time project work

2. Evidences for QIM metric 1.3.1:

(i) List of courses concerning to cross-cutting issues such as environment, values and ethics with sample courses indicated on a typical course structure of 2016 regulations.

(ii) List of events organized pertaining to gender equity with sample evidence.

(i) List of courses concerning to cross-cutting issues such as environment, values and ethics with sample courses indicated on a typical course structure of 2016 regulations.

Courses concerning to cross-cutting issues such as environment and Sustainability, values and ethics incorporated in the curriculum

- Professional Ethics
- Environmental Studies
- Environmental Pollution and Control
- Air Pollution and Control
- Green Technologies
- Renewable Energy
- Energy Audit and Conservation
- Water Supply Engineering
- Wastewater Technology
- Environmental Engineering Lab
- Geoenvironmental Engineering
- Groundwater Development and Management
- Solid Waste Management
- Disaster Mitigation and Management
- Planning for Sustainable Development
- Industrial Wastewater Treatment
- Environmental Impact Assessment and Management

Students are highly encouraged to carry out project works related to environmental engineering and sustainability. Over 80 Under Graduate Projects were carried out during the assessment years on environmental and sustainable issues.

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA

Projects on Environment and Sustainability

Department of Electrical and Electronics Engineering

2012-2013 Projects as Sample

Batch No.	Roll No.	Supervisor Name	Project Title	Societal Relevance
1.	09121A0228 09121A0233 09121A0222 09121A0262 09121A0251	Dr. T. Devaraju	Automatic Solar Lighting System	The project concerns with clean energy generation and protects the environment from toxics of conventional power generation.
2.	09121A0217 09121A0214 09121A0216 09121A0235 09121A0218	Prof. P. Umapathi Reddy	Auto Tracking Solar Power Generation	The project concerns with harvesting solar energy to sustain the energy generation process.
3.	09121A0270 09121A0230 09121A0204 09121A0213 09121A0255	Prof. M.S. Sujatha	LED Solar Street Lighting and Energy Auditing	The project concerns with solar lightning system to sustain the environment.
4.	09121A0206 09121A0226 09121A0227 09121A0259 09121A0236	Mr. N.M.G. Kumar	Design and Analysis of A P & O Algorithm for MPPT Phenomena for a Stand Alone P V System	The project concerns with efficient energy conversion process that sustain the environment.
5.	09121A0220 09121A0238 09121A0234 09121A0244 09121A0219	Mrs. W.V. Jahnavi	Solar Wind Hybrid Street Lighting System	The project concerns with solar lightning system to sustain the environment.
6.	09121A0290 09121A0281 09121A02B1 09121A0280	Mr. N. Pavan Kumar Reddy	Engineering Quality Control of Solar Powered Intelligent Water-Saving Irrigation	The project concerns with water saving irrigation system to protect and sustain the environment.
7.	09121A0295 09121A02A9 09121A0299 09121A02B3	Mr. G. Ravindra	Hybrid Active Wind Generator for Distributed Generation	The project concerns with clean energy generation and protects the environment from toxics of conventional power generation.
8.	09121A0273 09121A02B2 08121A0241 09121A0292	Mr. P. Venkatesh	Solar Based E-Uniform for Soldiers Who Work at Extreme Temperatures	The project concerns with solar powered uniforms for the soldiers to sustain the environmental stress.
9.	10125A0208 09121A02B4	Mr. N.M.G. Kumar	P V Module Based Five Level Inverter using	The project concerns with efficient energy

Batch No.	Roll No.	Supervisor Name	Project Title	Societal Relevance
	09121A0287		Multi Reference P W M Control Technique	conversion process that sustain the environment.
	09121A02A5			
	093T1A0219			
10.	09121A0286	Mrs. S. B. Aruna	A Constant Voltage MPPT Method For A Solar Powered Boost Converter With DC Motor Load	The project concerns with efficient energy conversion process that sustain the environment.
	09121A0276			
	09121A0272			
	09121A02A4			
11.	09121A02B7	Mr. N. Sreekanth	Combining the Wind Energy Generation System with Energy Storage Equipment.	The project concerns with clean energy generation and protects the environment from toxics of conventional power generation.
	09121A02A8			
	09121A02A3			
	09121A0298			

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Projects on Environment and Sustainability

Department of Civil Engineering

2016-2017 Projects as Sample

Batch No.	Roll No.	Supervisor Name	Project Title	Societal Relevance
1.	13121A0164 13121A0162 13121A0143 13121A0170 13121A0161	Mr. B. Sudhkar	Affordable Water Treatment System	With the affordable water treatment system we can remove BOD, COD and other pollutants so that it is possible to mitigate the poilution of the rivers.
2.	13121A0113 13121A0124 13121A0139 13121A0136 13121A0157	Dr. P Ramesh	Flyash Bricks Utilization of Waste Materials	With the utilization of the flyash bricks the cost of the construction and environmental pollution can be reduced.
3.	13121A0145 13121A0154 13121A0159 13121A0148 13121A0111	Dr. P Ramesh	Efficacy of M-Sand and Flyash in Improving Properties of Subgrade and Strength	This project helps the society to reduce the environmental pollution by way of effective utilization of Flyash.
4.	13121A0122 13121A0138 13121A0114 13121A0105 12121A0197	Dr. P Ramesh	Soil Stabilisation using Crumb Rubber Tyre Waste	This project helps to reduce the environmental pollution and the cost of the project.
5.	13121A0153 13121A0135 13121A0141 13121A0106 13121A0158	Dr. Hemadri Prasad Raju	Waste Stabilisation and Production of Biogas by using Food Waste	Waste stabilization minimizes the health risks on humans and animals. It prevents and controls the vector breeding. Use of biogas reduces the air pollution.
6.	13121A0137 13121A0142 13121A0102 13121A0116 13121A0134	Mr. M. Gokulnath	Design of Concrete by Partial Replacement of Cement with Granite Powder	Reduction in cost of materials and CO_2 emissions due to reduction in manufacturing of cement by effective use of granite powder.
7.	13121A0149 13121A0128 13121A0132 13121A0115	Dr. O. Eswara Reddy	Effect of Lime and Calcium Chloride on Rice Husk Ash Stabilised Expansive Soil	This project is useful to improve the suitability of the soils for construction.
8.	13121A0127 13121A0101	Mrs. G.G.	Influence of Egg Shell Powder and	Egg shells powder and Granite powder which are

Batch No.	Roll No.	Supervisor Name	Project Title	Societal Relevance
	13121A0123 13121A0150 13121A0169	Prasanna	Granite Powder on Expansive Soils	considered as waste materials but they can be used to improve suitability of the soils for construction.
9.	13121A0112 13121A0104 13121A0166 13121A0131	Mrs.P.Indiramma	Stabilisation of Expansive Soils using Brick Dust	Brick dust from manufacturing and construction sites are consider as waste materials but they can be used to improve suitability of the soils for construction.
10.	13121A0121 13121A0130 13121A0147 13121A0144 13121A0129	Dr. Hemadri Prasad Raju	Waste Stabilisation and Production of Biogas by using Garbage	Waste stabilization minimizes the health risk on humans. Biogas production is useful for heating, electricity generation and also reduces air pollution.
11.	14125A0118 14125A0103 14125A0120 14125A0117	Mrs. P. Indiramma	Stabilization of Expansive Soil by using Blast Furnace Slag and Fly Ash	Blast furnace slag and fly ash are consider as waste materials but they can be used to improve suitability of the soils for construction.
12.	14125A0108 13121A0175 13121A0177 13121A0191 14125A0104	Mr.K. Sandeep Kumar	Removal of Iron using Natural Adsorbents	Cost of the project can be reduces by using natural adsorpents, which are eco-friendly substances.
13.	13121A01A8 13121A01B3 13121A01H2 14125A0102 14125A0116	Mr. R.Vinod Kumar	An Experimental Study on using Fly Ash and Iron Oxide in Pavement Design	Fly ash is consider as waste materials but that can be used in pavement design with low cost.
14.	13121A0C0 13121A01A5 13121A01B9 13121A01B6 13121A0132	Dr. M. V. Subba Reddy	Sustainable Development of Surface and Groundwater Resources in Tirupati Rural Micro Watershed	This work is useful to the stake holders of the watershed to manage and develop the water resources for a sustainable development. This work provides awareness to the stake holder of the watershed on the quantity of water available and also the suitability of water for agriculture.
15.	13121A0176 13121A0172 14125A0123 13121A0193 13121A0174	Ms. N. Vidya	Study on Comprehensive Strength of Glass Fibre Reinforced Motar with Partial Replacement of Cement	Reduction in cost of materials and CO_2 emissions due to reduction in manufacturing of cement by effective use of glass fiber, glass wastes.

Batch No.	Roll No.	Supervisor Name	Project Title	Societal Relevance
16.	13121A01A1	Mr. V. Prem Kumar	Performance Evaluation of Bamboo Reinforced Concrete Beams	The bamboo reinforced concrete beams reduces the cost of construction.
	13121A01A9			
	14125A0115			
	14125A0106			
	12121A0108			
17.	13121A0183	Mr.D.V. Purushotham	An Experimental Study on Replacement of Cement Content in Concrete by Fly ash -Taguchi Method	Reduction in cost of materials and CO2 emissions due to reduction in manufacturing of cement by effective use of fly ash which is consider as waste material.
	14125A0110			
	14125A0105			
	13121A01B4			

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

CIVIL ENGINEERING

I B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
I Year - I Semester										
1.	16BT1HS01	Technical English	3	1	-	4	3	30	70	100
2.	16BT1BS01	Engineering Chemistry	3	1	-	4	3	30	70	100
3.	16BT1BS03	Matrices and Numerical Methods	3	1	-	4	3	30	70	100
4.	16BT1BS04	Multi–Variable Calculus and Differential Equations	3	1	-	4	3	30	70	100
5.	16BT10501	Programming in C	3	1	-	4	3	30	70	100
6.	16BT1HS31	English Language Lab	-	-	3	3	2	50	50	100
7.	16BT1BS31	Engineering Chemistry Lab	-	-	3	3	2	50	50	100
8.	16BT10331	Computer Aided Engineering Drawing	-	1	6	7	3	50	50	100
9.	16BT10531	Programming in C Lab	-	-	3	3	2	50	50	100
Total			**15**	**6**	**15**	**36**	**24**	**350**	**550**	**900**

I B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
I Year - II Semester										
1.	16BT1BS02	Engineering Physics	3	1	-	4	3	30	70	100
2.	16BT2BS01	Transformation Techniques and Partial Differential Equations	3	1	-	4	3	30	70	100
3.	16BT20101	Building Materials and Construction Technology	3	1	-	4	3	30	70	100
4.	16BT20102	Engineering Mechanics	4	1	-	5	4	30	70	100
5.	16BT20241	Basic Electrical and Electronics Engineering	3	1	-	4	3	30	70	100
6.	16BT1BS32	Engineering Physics Lab	-	-	3	3	2	50	50	100
7.	16BT20131	Building Materials and Construction Technology Lab	-	-	3	3	2	50	50	100
8.	16BT20252	MATLAB Practice for Civil Engineers	-	1	3	4	2	50	50	100
9.	16BT20331	Engineering Workshop Practice	-	-	3	3	2	50	50	100
Total			**16**	**6**	**12**	**34**	**24**	**350**	**550**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

II B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
II Year - I Semester										
1.	16BT3BS01	Probability Distributions and Statistical Methods	3	1	-	4	3	30	70	100
2.	16BT3HS02	Managerial Economics and Principles of Accountancy	3	1	-	4	3	30	70	100
3.	16BT30101	Construction Planning and Project Management	3	1	-	4	3	30	70	100
4.	16BT30102	Fluid Mechanics and Hydraulic Machinery	3	1	-	4	3	30	70	100
5.	16BT30103	Mechanics of Solids	3	1	-	4	3	30	70	100
6.	16BT30104	Surveying	3	1	-	4	3	30	70	100
7.	16BT30131	Fluid Mechanics and Hydraulic Machinery Lab	-	-	3	3	2	50	50	100
8.	16BT30132	Strength of Materials Lab	-	-	3	3	2	50	50	100
9.	16BT30133	Surveying Lab	-	-	3	3	2	50	50	100
Total			**18**	**6**	**9**	**33**	**24**	**330**	**570**	**900**

II B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
II Year - II Semester										
1.	16BT3HS01	Environmental Studies	3	-	-	3	3	30	70	100
2.	16BT40101	Concrete Technology	3	1	-	4	3	30	70	100
3.	16BT40102	Engineering Geology	3	1	-	4	3	30	70	100
4.	16BT40103	Engineering Hydrology	3	1	-	4	3	30	70	100
5.	16BT40104	Structural Analysis-I	3	1	-	4	3	30	70	100
6.	16BT40105	Water Supply Engineering	3	1	-	4	3	30	70	100
7.	16BT40131	Concrete Technology Lab	-	-	3	3	2	50	50	100
8.	16BT40132	Engineering Geology Lab	-	-	3	3	2	50	50	100
9.	16BT4HS31	Soft Skills Lab	-	-	3	3	2	50	50	100
Total			**18**	**5**	**9**	**32**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (I Semester)

S. No.	Course Code	Course Title	Course Category Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
III Year - I Semester										
1.	16BT50101	Irrigation Engineering	3	1	-	4	3	30	70	100
2.	16BT50102	Reinforced Cement Concrete Structures	3	1	-	4	3	30	70	100
3.	16BT50103	Soil Mechanics	3	1	-	4	3	30	70	100
4.	16BT50104	Structural Analysis-II	3	1	-	4	3	30	70	100
5.	16BT50105	Wastewater Technology	3	1	-	4	3	30	70	100
6.		Interdisciplinary Elective-1	3	1	-	4	3	30	70	100
	16BT50441	1. Principles of Image Processing								
	16BT5HS01	2. Costing and Finance Management for Civil Engineers								
	16BT50241	3. Renewable Energy								
	16BT70308	4. Computational Fluid Dynamics								
7.	16BT50131	Computer Aided Building Planning and Drawing	-	1	3	4	2	50	50	100
8.	16BT50132	Environmental Engineering Lab	-	-	3	3	2	50	50	100
9.	16BT50133	Geotechnical Engineering Lab	-	-	3	3	2	50	50	100
Total			**18**	**7**	**9**	**34**	**24**	**330**	**570**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

III B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination		
								Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
III Year - II Semester										
1.	16BT60101	Foundation Engineering	3	1	-	4	3	30	70	100
2.	16BT60102	Highway and Traffic Engineering	3	1	-	4	3	30	70	100
3.	16BT60103	Steel Structures	3	1	-	4	3	30	70	100
4.	**Interdisciplinary Elective-2**		3	1	-	4	3	30	70	100
	16BT40502	1. Data Base Management Systems								
	16BT50341	2. Optimization Techniques								
	16BT60104	3. Fire Engineering								
	16BT60241	4. Energy Audit and Conservation								
5.	**Program Elective – 1**		3	1	-	4	3	30	70	100
	16BT60105	1. Advanced Reinforced Cement Concrete Structures								
	16BT60106	2. Advanced Structural Analysis								
	16BT60107	3. Advanced Surveying								
	16BT60108	4. Geoenvironmental Engineering								
	16BT60109	5. Groundwater Development and Management								
	16BT60110	6. Solid Waste Management								
	16BT60111	7. Structural Health Monitoring								
6.	**Open Elective**		3	1	-	4	3	30	70	100
7.	16BT60131	Computer Aided Design and Detailing Lab	-	-	3	3	2	50	50	100
8.	16BT60132	Highway Engineering Lab	-	-	3	3	2	50	50	100
9.	16BT60133	Seminar	-	-	-	-	2	-	100	100
10.	16BT6MOOC	MOOC	-	-	-	-	-	-	-	-
Total			**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

Open Electives: III B. Tech. – III semester (CE, ME, CSE, IT & CSSE)

IV B. Tech – I Semester (ECE, EEEE & EIE)

Sl. No.	Course Code	Open Elective Course Title	Sl. No.	Course Code	Open Elective Course Title
1.	16BT6HS01	Banking and Insurance	16.	16BT60114	Disaster Mitigation and Management
2.	16BT6HS02	Business Communication and Career Skills	17.	16BT60115	Environmental Pollution and Control
3.	16BT6HS03	Cost Accounting and Financial Management	18.	16BT60116	Planning for Sustainable Development
4.	16BT6HS04	Entrepreneurship for Micro, Small and Medium Enterprises	19.	16BT60117	Professional Ethics
5.	16BT6HS05	French Language	20.	16BT60118	Rural Technology
6.	16BT6HS06	German Language	21.	16BT60308	Global Strategy and Technology
7.	16BT6HS07	Indian Constitution	22.	16BT60309	Intellectual Property Rights and Management
8.	16BT6HS08	Indian Economy	23.	16BT60310	Managing Innovation and Entrepreneurship
9.	16BT6HS09	Indian Heritage and Culture	24.	16BT60311	Materials Science
10.	16BT6HS10	Indian History	25.	16BT70412	Green Technologies
11.	16BT6HS11	Personality Development	26.	16BT70413	Introduction to Nanoscience and Technology
12.	16BT6HS12	Philosophy of Education	27.	16BT60505	Engineering System Analysis and Design
13.	16BT6HS13	Public Administration	28.	16BT71011	Micro-Electro-Mechanical Systems
14.	16BT60112	Building Maintenance and Repair	29.	16BT61205	Cyber Security and Laws
15.	16BT60113	Contract Laws and Regulations	30.	16BT61505	Bio-informatics

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

IV B.Tech. (I Semester)

S. No.	Course Code	Course Title	Course Category Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
IV Year - I Semester										
1.	16BT70101	Estimation and Quantity Surveying	3	1	-	4	3	30	70	100
2.	16BT70102	Geospatial Technologies	3	1	-	4	3	30	70	100
3.	16BT70103	Railway, Airport and Harbour Engineering	3	1	-	4	3	30	70	100
4.		Program Elective – 2	3	1	-	4	3	30	70	100
5.	16BT70104 16BT70105 16BT70106 16BT70107 16BT70108 16BT70109 16BT70110	1. Advanced Foundation Engineering 2. Architecture and Town Planning 3. Environmental Impact Assessment and Management 4. Global Positioning System (GPS) 5. Structural Dynamics 6. Transportation Planning and Management 7. Water Resources Systems Planning and Management Program Elective – 3	3	1	-	4	3	30	70	100
6.	16BT70111 16BT70112 16BT70113 16BT70114 16BT70115 16BT70116 16BT70117	1. Advanced Steel Structures 2. Earthquake Resistant Design of Structures 3. Highway Construction and Maintenance 4. Industrial Wastewater Treatment 5. Infrastructure Development and Management 6. Soil Dynamics and Machine Foundations 7. Watershed Management Program Elective – 4	3	1	-	4	3	30	70	100
7.	16BT70118 16BT70119 16BT70120 16BT70121 16BT70122 16BT70123 16BT70124 16BT70131	1. Air Pollution and Control 2. Bridge Engineering 3. Ground Improvement Techniques 4. Hydro Power Engineering 5. Pavement Analysis and Design 6. Prestressed Concrete 7. Rehabilitation and Retrofitting of Structures Civil Engineering Software Lab	-	-	3	3	2	50	50	100
8.	16BT70132	Remote Sensing and Geographical Information Systems Lab	-	-	3	3	2	50	50	100
9.	16BT70133	Comprehensive Assessment	-	-	-	-	2	-	100	100
Total			**18**	**6**	**6**	**30**	**24**	**280**	**620**	**900**

Extracts of Syllabus Books

COURSE STRUCTURE (2016-2017)

IV B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
IV Year - II Semester										
1.	16BT80131	Project Work*	-	-	-	-	12	100	100	200
		Total	-	-	-	-	**12**	**100**	**100**	**200**

(ii) List of events organized pertaining to gender equity with sample evidence.

Add-on courses and activities organized through technical associations on issues pertaining to gender such as respect, equality and empowerment during the assessment years

Year	Title of the Program	Date and Duration (from-to)	Number of Participants by Gender	
			Female	Male
2016-17	An Expert Talk on "Women Empowerment in Research and Engineering"	14-03-2017	40	35
	An Expert Talk on "Gender Equality and Women Empowerment"	07-03-2017	173	237
	Seminar on "Women Entrepreneurship the Emerging Economic Workforce: Turning Challenges in to Opportunities"	20-02-2017	70	-
	An Expert Talk on "Gender Equality and Women Empowerment"	14-01-2017	173	148
	Seminar on Feminism in "Contemporary India: Issues & Challenges"	12-12-2016	36	24
	An Expert Talk on "Glass Ceiling"	22-07-2016	86	98
2015-16	A Seminar on "The Persistence of Discrimination, Harassment and Inequality for Women"	28-01-2016	124	-
	An Expert Talk on "Women Empowerment through Engineering Education"	22-01-2016	45	35
	An Invited Talk on "Effect of Globalization and Technological Changes in Gender Equity"	16-03-2016	170	152
	A Workshop for Students on "Legislations and Government Schemes"	23-07-2015	67	44
2014-15	An Expert Talk on "Empowering Female Engineers"	18-02-2015	44	32
	Workshop for Students on "Women Safety - Self Responsibility"	19-01-2015	174	187
	A Talk on "Gender Equity in Physical Activities"	15-04-2015	165	134
	An Expert Talk on "Gender Issues at Work Place"	30-03-2015	209	178
	Debate on "Gender Sensitization - Need of the Hour"	06-10-2014	144	97
	Workshop on "Gender Awareness-Equality Issues"	16-09-2014	80	50
2013-14	A Lecture on "Institutional Innovations for Gender Equality"	26-03-2014	172	124
	An Expert Talk on "Empowering Women to Reach Society's Full Potential"	11-02-2014	40	32
	Focused Group Discussion on "Gender Issues - Challenges and Solutions"	20-01-2014	24	27
	An Expert Talk on "Gender Bias - Hurdles and Issues"	29-07-2013	49	32
2012-13	A Guest lecture on "Gender Equity Versus Gender Equality"	25-04-2013	160	120
	An Expert Talk on "Women Empowerment - Challenges and Opportunities"	14-02-2013	30	35
	An Awareness Programme on "Gender Equity - Concept and Consequences"	19-12-2012	181	239

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUOTONOMOUS)

Sree Sainath Nagar, Tirupati – 517 102

Women's Protection Cell

An Expert Talk on

"Gender Equity – Women Empowerment"

(07-03-2017)

An expert talk was conducted by Women's Protection Cell on 07th March 2017 on "Gender Equity – Women Empowerment" by Dr. P. Vijaya Lakshmi, Professor of Journalism, Sri Padmavathi Mahila Viswa Vidyalayam.

Dr. Lakshmi delivered a talk on Gender Equity from the journalistic perspective. She elaborately talked about latest phase of gender sensitization; need and significance of paradigm shift in the thinking process of individuals and society as a whole.

A total r of 410 participants got an enriching experience as an audience of the talk.

Dr. Lakshmi sharing her thoughts with the audeince

The mesmerized audience of the expert talk

3. Evidences for QnM metric 1.1.2:

(i) Certificate indicating list of programs where syllabus revision was carried out during the last five years

SREE VIDYANIKETHAN
Engineering College
(Autonomous)

Dt : 16-07-2018

CERTIFICATE

This is to certify that the following are the programs where syllabus revision was carried out during the last five assessment years considering and counting revision of program only once.

S. No.	Program Code	Program name of revised syllabus
1	01	B. Tech – Civil Engineering
2	02	B. Tech – Electrical and Electronics Engineering
3	03	B. Tech – Mechanical Engineering
4	04	B. Tech - Electronics and Communication Engineering
5	05	B. Tech – Computer Science and Engineering
6	10	B. Tech - Electronics and Instrumentation Engineering
7	12	B. Tech – Information Technology
8	15	B. Tech - Computer Science and System Engineering
9	05	M. Tech – Computer Science
10	07	M. Tech - Electrical Power Systems
11	25	M. Tech – Software Engineering
12	38	M. Tech - Digital Electronics and Communication Systems
13	57	M. Tech - VLSI
14	61	M. Tech - Communication Systems
15	63	M. Tech – Computer Networks and Information Security
16	01	MCA - Master of Computer Applications

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

Sree Sainath Nagar, Tirupati,
Andhra Pradesh - 517 102
0877-3066900 / 01
0877-2236712 / 14
+91 877 3066999
www.vidyanikethan.edu
svecp@vidyanikethan.edu

The number of programs revised out of total number of programs in the last five years is 16 (8 B. Tech., 7 M. Tech., and 1 MCA Programs) out of 19 programs. While calculating the percentage of programs where revision was carried out during the last five years, in the DVV the denominator is calculated cumulatively and is taken as 96 instead of 19. Hence the response should be 16/19=**84.21%** **instead of 16/96=16.67%.**

Note: The three programs where revision is not possible are the Ph. D programs offered in the University recognized research centers of Computer science, Electrical and Electronics Engineering and Electronics and Communication Engineering.

No. of Programs offered during the Assessment Period = **19**

(Includes 3 Ph.D Programs one each in the Departments of ECE, EEE & CSE)

No. of Programs where syllabus revision was carried-out = **16**

(B.Tech – 8; M.Tech – 7 and MCA)

Percentage of Programs where syllabus revision was carried-out

= (16/19) x 100 = **84.21 %**

PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.