Program Specific Outcomes (PSO) and Course Outcomes (CO)
Faculty - Bachelor of Vacation
AY-2019-20
(UG Departments)

Name of Faculty	Science and Technology
Name of Department	Software Development
Departmental Email ID	bvocsdnacsp@gmail.com
UG Programme	**B. Voc. Software Development (Diploma level)**

Programme Specific Outcomes (PSO)

1. The fundamentals, principles, programming skills and recent developments in the Software Industries.

2. Inspire and boost interest of the students towards Information Technology and Software Development as the main subject and understand issues.

3. To create foundation for advanced studies, research and development in Software Development.

Course Outcomes(CO): F.Y. B. Voc. (Semester-I)

SDT-11: Soft Skill –English and Communication Skill

1. Develop the communicative skills, proficiency in English language and enhance their employability.

2. Develop students' communicative competence.

3. Encourage and enable the students to become proficient users of English language.

4. To introduce the different modes of Communication.

SDT-12: Computer Fundamentals

1. The course is designed to aim at imparting a basic level appreciation program for the common man. After completing the course the incumbent is able to the use the computer for basic purposes of preparing his personal and business letters, searching information on Internet (the web), sending E-mails, using internet banking service etc.

2. It allows a common person to be also a part of computer user's making them

digitally literate. This would also aid the PC penetration program. This helps the small business communities, housewives to maintain their small account using the computers and enjoy in the world of Information Technology.

SDT-13: Introduction to C Programming I

1. Develop problem solving abilities using a computer.

2. Build the necessary skill set and analytical abilities for developing computer based solutions for real life problems.

3. Train students in professional skills related to Software Industry and prepare necessary knowledge base for research and development in Computer Science.

4. Help students build-up a successful career in Computer Science

SDT–14: Database Management System

1. Understand database concepts and structures and query language

2. Understand the E R model and relational model

3. To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modeling, designing, and implementing a DBMS.

4. Understand Functional Dependency and Functional Decomposition.

5. Apply various Normalization techniques

6. Perform PL/SQL programming using concept of Cursor Management, Error Handling, Package and Triggers

7. Execute various advance SQL queries related to Transaction Processing & Locking using concept of Concurrency control.

8. Understand query processing and techniques involved in query optimization.

9. Understand the principles of storage structure and recovery management.

SDP–15: Practical I- Soft Skill Development

1. Develop student Personality by improving the communication skill

2. Prepare student for Presentations as well as Interview.

3. Student will able to Communicate in business.

SDP–16: Practical II- C Programming Computer Hardware

1. Make the student learn a programming language.

2. Learn problem solving techniques.

3. Teach the student to write programs in C and to solve the problems.

SDP–17: Practical III- Database Management System, HTML, CSS

1. Design conceptual models of a database using ER modeling for real life applications and also construct queries in Relational Algebra.

2. Create and populate a RDBMS for a real-life application, with constraints and keys, using SQL.

3. Retrieve any type of information from a data base by formulating complex queries in SQL.

4. Analyze the existing design of a database schema and apply concepts of normalization to design an optimal database.

5. Build indexing mechanisms for efficient retrieval of information from a database.

Course Outcomes(CO): F.Y. B. Voc. (Semester-III)

SDT–21: Mathematics

1. Demonstrate the ability to think critically, research, and reason. (Ethical Leadership)

2. Students will recognize and differentiate among diverse cultures through the history of mathematics. (Cultural Competence)

3. Students will engage in activities directly benefitting the broader community. (Community Engagement)

4. Students will demonstrate an understanding of the common body of knowledge in mathematics.

5. Students will demonstrate the ability to apply analytical and theoretical skills to model and solve mathematical problems.

6. Students will demonstrate the ability to analyze data and draw appropriate statistical conclusions.

7. Students will demonstrate the ability to effectively utilize a variety of teaching techniques and classroom strategies to positively influence student learning.

SDT–22: Hardware and Networking

1. The Course shall introduce the Hardware and Networking Concepts and its use in the Information Technology industry

2. It imparts Functional IT knowledge to the students.

3. To familiarize the students to the world of Hardware & Networking in Computer.

SDT–23: Introduction to C Programming-II

1. Develop problem solving abilities using a computer.

2. Build the necessary skill set and analytical abilities for developing computer based solutions for real life problems.

3. Train students in professional skills related to Software Industry and prepare necessary knowledge base for research and development in Computer Science.

4. Help students build-up a successful career in Computer Science

SDT–24: Relational Database Management System

1. Demonstrate an understanding of the elementary & advanced features of DBMS & RDBMS.

2. Develop a clear understanding of the conceptual frameworks and definitions of specific terms that are integral to the Relational Database Management Systems.

3. Attain a good practical understanding of the SQL.

4. Develop clear concepts about Relational Model.

5. Examine techniques pertaining to Database design practices.

6. Prepare various database tables and joins them using SQL commands.

SDP–25: Practical –I: Hardware and Networking

1. To know the motherboard, BIOS and Storage devices features and its functions.

2. Assemble personal computer.

3. Create partitioning of hard disk 4 Install system and application software.

4. Establish small network involving two or more Pcs.

5. Configure to protect system from virus.

SDP–26: Practical –II: C Programming

1. Make the student learn a programming language.

2. Learn problem solving techniques.

3. Teach the student to write programs in C and to solve the problems.

SDP–27: Practical –III: Relational Database Management System

1. Understanding of Database Programming Languages

2. Master the basics of database languages and construct queries using SQL, PLSQL, NoSQL

3. Master the basic concepts of Database Project Life Cycle and appreciate the applications of database systems

4. Understand how analytics and big data affect various functions now and in the future

5. Appreciate the impact of analytics and big data on the information industry and the external ecosystem for analytical and data services

Name of Faculty	Science and Technology
Name of Department	Renewable Energy Technology and Management
Departmental Email ID	**bvocnacsp@gmail.com**
UG Programme	**B. Voc. Software Development (Diploma level)**

Programme Specific Outcomes (PSO)

4. To Provide mix Skill related to profession and appropriate content of general education

5. To provide flexibility to the students by means of pre-defined entry and multiple exit points

6. To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.

7. To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements

8. To provide vertical mobility to students coming out of 10+2 with vocational subject

Course Outcomes(CO): F.Y. B. Voc.

RET-1-1: Introduction to Renewable Energy Sources

5. To provide knowledge of various conventional and non-conventional energy resources.

6. This course provides information about need and importance of Renewable energy in present days.

RET-1-2: Basic Electronics

3. This course will provide knowledge of Passive components and basic circuit, DC Circuit, Semiconductor devices and Operational Amplifier

RET-1-3: Basic Mechanical Engineering

5. Student will able to understand the different types of forces

6. After completion of this course students will be expert in engineering drawing and fluid mechanics

RET-2-1: Sustainable Development and Energy

10. Students will be able to understand sustainability, sustainable development and social ethics, Challenges and opportunities in sustainable practices.

11. Students will be able to understand Energy Scenario, solar energy and its conversion

RET-2-2: Applications of Solar Energy

4. Students will be able to know Photovoltaic applications of solar energy and Industrial, Social consumer applications of solar Photovoltaic system

5. Students will be able to know photo thermal applications of solar energy

RET-2-3: Bio-Energy

4. Students will know about concept of bioenergy which includes Biomass and Biofuel. Production and applications of bioenergy.

REP-1-4: Practical – I (Life Skills and Software Tools)

6. To make students literate in basic computer applications such as MS-Office, MS power point, MS-Excel

7. After learning course students will develop their Soft Skills like Communication skills, Time management, Problem solving abilities etc.

. ## REP-1-5: Practical – II (Based on Theory)

1. Correlation between practical experiments with theory to improve the understanding.

REP-2-4: Practical – III (Industrial Training & Field Work)

1. After completion of Industrial training students will be treated as Skilled

personnel they will be ready work force for industries

. **REP-2-5: Practical – IV (Based on Theory)**

        1.   Correlation between experiments with theory to improve the understanding