



# SREE RAMA ENGINEERING COLLEGE

## (AUTONOMOUS)

Approved by AICTE, New Delhi – Affiliated to JNTUA, Ananthapuramu  
 Accredited by NAAC with 'A' Grade  
 Rami Reddy Nagar, Karakambadi road, Tirupati-517507

### Department of Electrical and Electronics Engineering

#### SRET24 I B. Tech I & II Sem

#### Course Structure

Semester-I						
S. No.	Course Code	Course Name	L	T	P	Credits
1.	24BTHS01T	Communicative English	2	0	0	2
2.	24BTBS05T	Chemistry	3	0	0	3
3.	24BTBS02T	Linear Algebra & Calculus	3	0	0	3
4.	24BTCE01T	Basic Civil & Mechanical Engineering	3	0	0	3
5.	24BTCS01T	Introduction to Programming	3	0	0	3
6.	24BTHS01P	Communicative English Lab	0	0	2	1
7.	24BTBS05P	Chemistry Lab	0	0	2	1
8.	24BTME01P	Engineering Workshop	0	0	3	1.5
9.	24BTCS01P	Computer Programming Lab	0	0	3	1.5
10.	24BTHS01L	Health and Wellness, Yoga and Sports	-	-	1	0.5
<b>Total</b>			<b>14</b>	<b>00</b>	<b>11</b>	<b>19.5</b>

Semester-II						
S. No.	Course Code	Course Name	L	T	P	Credits
1.	24BTBS01T	Engineering Physics	3	0	0	3
2.	24BTBS04T	Differential Equations and Vector calculus	3	0	0	3
3.	24BTEE01T	Basic Electrical & Electronics Engineering	3	0	0	3
4.	24BTME01T	Engineering Graphics	1	0	4	3
5.	24BTCS02P	IT Workshop	0	0	2	1
6.	24BTEE02T	Electrical Circuit Analysis – I <b>(Branch Specific)</b>	3	0	0	3
7.	24BTBS01P	Engineering Physics Lab	0	0	2	1
8.	24BTEE01P	Electrical & Electronics Engineering workshop	0	0	3	1.5
9.	24BTEE02P	Electrical Circuit Analysis – I Lab <b>(Branch Specific)</b>	0	0	3	1.5
10.	24BTHS01C	NSS / NCC / Scouts & Guides / Community Service	-	-	1	0.5
<b>Total</b>			<b>13</b>	<b>0</b>	<b>15</b>	<b>20.5</b>

L	T	P	C
0	0	1	0.5

**(24BTHS01L) HEALTH AND WELLNESS, YOGA AND SPORTS**  
(Common to All Branches of Engineering)

**Course Objectives:**

- To maintain their mental and physical wellness upright and develop ability in them to cope up with the stress arising in the life.
- To create space in the curriculum to nurture the potential of the students in sports/games/yoga etc.
- To introduce a practice oriented introductory course on the subject.

**Course Outcomes:**

After the completion of the course the student will be able to

- CO1. Be Physical fit to perform daily routine without undue fatigue.
- CO2. Be Mentally alert and Socially Cohesive
- CO3. Consider success and failure equally.
- CO4. Develop Positive Personality
- CO5. Improve Leadership qualities.

**UNIT I**

Concept of health and fitness, Nutrition and Balanced diet, basic concept of immunity Relationship between diet and fitness, Globalization and its impact on health, Body Mass Index (BMI) of all age groups.

**Activities:**

- i) Organizing health awareness programmes in community
- ii) Preparation of health profile
- iii) Preparation of chart for balance diet for all age groups

**UNIT II**

Concept of yoga, need for and importance of yoga, origin and history of yoga in Indian context, classification of yoga, Physiological effects of Asanas- Pranayama and meditation, stress management and yoga, Mental health and yoga practice.

**Activities:**

Yoga practices – Asana, Kriya, Mudra, Bandha, Dhyana, Surya Namaskar

**UNIT III**

Concept of Sports and fitness, importance, fitness components, history of sports, Ancient and Modern Olympics, Asian games and Commonwealth games.

**Activities:**

- i) Participation in one major game and one individual sport viz., Athletics, Volleyball, Basketball, Handball, Football, Badminton, Kabaddi, Kho-kho, Table tennis, Cricket etc.

Practicing general and specific warm up, aerobics

ii) Practicing cardiorespiratory fitness, treadmill, run test, 9 min walk, skipping and running.

**General Guidelines:**

1. Institutes must assign slots in the Timetable for the activities of Health/Sports/Yoga.
2. Institutes must provide field/facility and offer the minimum of five choices of as many as Games/Sports.
3. Institutes are required to provide sports instructor / yoga teacher to mentor the students.

**Evaluation Guidelines:**

- Evaluated for a total of 100 marks.
- A student can select 6 activities of his/her choice with a minimum of 01 activity per unit. Each activity shall be evaluated by the concerned teacher for 15 marks, totalling to 90 marks.
- A student shall be evaluated by the concerned teacher for 10 marks by conducting viva voce on the subject.



L	T	P	C
0	0	1	0.5

**(24BTHS01C) NSS/NCC/SCOUTS & GUIDES/COMMUNITY SERVICE**  
(Common to All Branches of Engineering)

**Course Objectives:**

- To impart discipline, character, and fraternity amongst young citizens
- To train them to work in teams/groups to enhance their team spirit.
- To enable the students to acquire leadership qualities.
- To induce social consciousness among students through various activities.
- To instill self-confidence and the ideals of selfless service
- To engage students in responsible and challenging actions for the common good.

**Course Outcomes:** After completion of the course the students will be able to

CO1. Understand the importance of discipline, character and service motto.

CO2. Outline the needs and problems of the community.

CO3. Solve some societal issues by applying acquired knowledge, facts, and techniques.

CO4. Explore human relationships by analyzing social problems.

CO5. Determine to extend their help for the fellow beings and downtrodden people.

CO6. Develop leadership skills and civic responsibilities.

**UNIT I Orientation**

General Orientation on NSS/NCC/ Scouts & Guides/Community Service activities, career guidance.

**Activities:**

- Conducting –ice breaking sessions-expectations from the course-knowing personal talents and skills
- Conducting orientations programs for the students –future plans-activities-releasing road map etc.
- Displaying success stories-motivational biopics- award winning movies on societal issues etc.
- Conducting talent show in singing patriotic songs-paintings- any other contribution.

**UNIT II Nature & Care**

**Activities:**

- Best out of waste competition.
- Poster and signs making competition to spread environmental awareness.
- Recycling and environmental pollution article writing competition.
- Organising Zero-waste day.
- Digital Environmental awareness activity via various social media platforms.
- Virtual demonstration of different eco-friendly approaches for sustainable living.
- Write a summary on any book related to environmental issues.

**UNIT III Community Service**

**Activities:**

- Conducting One Day Special Camp in a village contacting village-area leaders- Survey
- in the village, identification of problems- helping them to solve via media- authorities experts etc.

- a. Conducting awareness programs on Health-related issues such as General Health,
- iii. Mental health, Spiritual Health, HIV/AIDS,
  - a. Conducting consumer Awareness. Explaining various legal provisions etc.
  - b. Women Empowerment Programmes- Sexual Abuse, Adolescent Health and Population
- iv. Education.
  - a. Any other programmes in collaboration with local charities, NGOs etc.

**Reference Books:**

1. Nirmalya Kumar Sinha & Surajit Majumder, *A Text Book of National Service Scheme Vol;.I*, Vidya Kutir Publication, 2021 ( ISBN 978-81-952368-8-6)
2. *Red Book - National Cadet Corps – Standing Instructions Vol I & II*, Directorate General of NCC, Ministry of Defence, New Delhi
3. Davis M. L. and Cornwell D. A., “Introduction to Environmental Engineering”, McGraw Hill, New York 4/e 2008
4. Masters G. M., Joseph K. and Nagendran R. “Introduction to Environmental Engineering and Science”, Pearson Education, New Delhi. 2/e 2007
5. Ram Ahuja. *Social Problems in India*, Rawat Publications, New Delhi.

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