



# R.M.K. ENGINEERING COLLEGE (An Autonomous Institution)

R.S.M Nagar, Kavaraipettai, Gummidipoondi Taluk, Thiruvallur Dt- 601206.

(Affiliated to Anna University, Chennai/Approved by AICTE, New Delhi/ ISO 9001:2015 Certified Institution/  
Accredited by NAAC with A+ Grade/ All the eligible UG Programs are accredited by NBA, New Delhi)



## DEPARTMENT OF SCIENCE & HUMANITIES

Course Outcomes – Odd semester - 2022 -23

**B.E., - Civil Engineering – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22PH101	Physics for Civil Engineering
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EE101	Basic Electrical, Electronics and Instrumentation Engineering
6	1	22HS101	Professional Communication
			<b>LABORATORY COURSES</b>
7	1	22ME111	Product Development Lab - I
			<b>MANDATORY COURSES</b>
8	1	22CH104	Environmental Sciences and Sustainability (Non Credit)
9	1		Induction Program (Non Credit)

## First Semester B.E., / CE

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22PH101- Physics for Civil Engineering	
<b>COs</b>	<b>Course Outcomes:</b> On completion of this course, the students will be able to
<b>CO1</b>	Explain the different forms of waves and the different types of oscillations
<b>CO2</b>	Describe the thermal concepts and its applications
<b>CO3</b>	Explain sound absorption coefficient, factors affecting acoustics of buildings, noise and sound insulation methods
<b>CO4</b>	Interpret the properties of various nano and novel Engineering materials and their applications
<b>CO5</b>	Associate the properties of magnetic and super conducting materials and their applications

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EE101-Basic Electrical, Electronics and Instrumentation Engineering

<b>COs</b>	<b>Course Outcomes:</b> After the completion of the course, students should be able to:
<b>CO1</b>	Understand concept of DC and AC electric circuits
<b>CO2</b>	Identify appropriate machine for a given application
<b>CO3</b>	Understand the working of electron devices
<b>CO4</b>	Demonstrate the concept of digital logic circuits
<b>CO5</b>	Choose appropriate transducers for specific application
<b>CO6</b>	Choose appropriate instruments for given application

### 22HS101- Professional Communication

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Comprehend conversations and short talks delivered in English
<b>CO2</b>	Participate efficiently in informal conversations and develop an awareness of the self and apply well-defined techniques
<b>CO3</b>	Read articles of a general kind in magazines and newspapers efficiently
<b>CO4</b>	Write short general essays, personal letters and E-mails in English
<b>CO5</b>	Develop vocabulary of a general kind by enriching reading skills

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

22CH104 - Environmental Sciences and Sustainability	
<b>COs</b>	<b>Course Outcomes:</b> Upon completion of the course, the students will be able to
<b>CO1</b>	Investigate and use conservational practices to protect natural resources.
<b>CO2</b>	Identify the causes of pollutants and illustrate suitable methods for pollution abatement.
<b>CO3</b>	Adapt the values of biodiversity and its conservation methods.
<b>CO4</b>	Recognize suitable sustainable development practices and apply it in day-to-day life.
<b>CO5</b>	Assess the impacts of human population and suggest suitable solutions.

### Induction Program

<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.



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## DEPARTMENT OF SCIENCE & HUMANITIES

### Course Outcomes – Odd semester - 2022 -23

### **B.E., - Computer Science Engineering – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22CH101	Engineering Chemistry
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EC101	Digital Principles and System Design
LABORATORY COURSES WITH THEORY COMPONENT			
6	1	22ME202	Computer Aided Engineering Graphics
LABORATORY COURSES			
7	1	22ME111	Product Development Lab-1
MANDATORY COURSES			
8	1		Induction Program (Non Credit)

## First Semester B.E., / CSE

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22CH101- Engineering Chemistry	
<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the students will be able to
<b>CO1</b>	Interpret the water quality parameters and explain the various water treatment methods.
<b>CO2</b>	Construct the electro chemical cells and sensors.
<b>CO3</b>	Compare different energy storage devices and predict their relevance in electric vehicles.
<b>CO4</b>	Classify different types of smart materials, their properties and applications in Engineering and Technology.
<b>CO5</b>	Integrate the concepts of nano chemistry and enumerate its applications in various fields.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EC101- Digital Principles and System Design

<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the student will be able to
<b>CO1</b>	Implement digital circuits using simplified Boolean functions.
<b>CO2</b>	Realize Combinational circuits for a given function using logic gates.
<b>CO3</b>	Demonstrate the operation of various counters and shift registers using Flip Flops.
<b>CO4</b>	Analyze Synchronous Sequential circuits.
<b>CO5</b>	Summarize the various types of memory devices.
<b>CO6</b>	Design the Combinational circuits using Programmable Logic Devices.
<b>CO7</b>	Perform practical exercises as an individual and / or team member to manage the task in time.
<b>CO8</b>	Express the experimental results with effective presentation and report.



## Laboratory Courses with Theory Component

22ME202 - Computer Aided Engineering Graphics	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course, the students will be able to
<b>CO1</b>	Explain the various engineering standards required for drafting and explore knowledge in conic sections.
<b>CO2</b>	Draw the orthographic views of 3D primitive objects.
<b>CO3</b>	Describe the projection of plane surfaces by the rotating plane method.
<b>CO4</b>	Apply the projection concepts and drafting tools to draw projections of solids.
<b>CO5</b>	Sketch the pictorial views of the objects using CAD tools.

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

Induction Program	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.



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## DEPARTMENT OF SCIENCE & HUMANITIES

### Course Outcomes – Odd semester - 2022 -23

### **B.E., - Electrical and Electronics Engineering – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22PH102	Physics for Electronics Engineering
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EE103	Basics of Electrical Engineering
6	1	22HS101	Professional Communication
<b>LABORATORY COURSES</b>			
7	1	22ME111	Product Development Lab - I
<b>MANDATORY COURSES</b>			
8	1	22CH104	Environmental Sciences and Sustainability (Non Credit)
9	1		Induction Program (Non Credit)

## First Semester B.E., / EEE

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22PH102- Physics for Electronics Engineering	
<b>COs</b>	<b>Course Outcomes:</b> On completion of this course, the students will be able to
<b>CO1</b>	Discuss the basic principles of working of laser and their applications in fibre optic communication
<b>CO2</b>	Summarize the classical and quantum electron theories and energy band structures
<b>CO3</b>	Describe the conductivity in intrinsic and extrinsic semiconductors and importance of Hall effect measurements
<b>CO4</b>	Associate the properties of nanoscale materials and their applications in quantum computing
<b>CO5</b>	Explain the concepts of photovoltaic technology and its applications.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EE103- Basics of Electrical Engineering

<b>COs</b>	<b>Course Outcomes:</b> At the end of the course, students will be able to:
<b>CO1</b>	Apply the knowledge of basic circuits and domestic wiring
<b>CO2</b>	Understand magnetic circuits and its parameters
<b>CO3</b>	Apply the laws governing electromagnetic and wave equations
<b>CO4</b>	Describe the working principle of measuring instruments
<b>CO5</b>	Understand the power generation systems
<b>CO6</b>	Understand the structure of power system and various distribution systems

### 22HS101- Professional Communication

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Comprehend conversations and short talks delivered in English
<b>CO2</b>	Participate efficiently in informal conversations and develop an awareness of the self and apply well-defined techniques
<b>CO3</b>	Read articles of a general kind in magazines and newspapers efficiently
<b>CO4</b>	Write short general essays, personal letters and E-mails in English
<b>CO5</b>	Develop vocabulary of a general kind by enriching reading skills

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

22CH104 - Environmental Sciences and Sustainability	
<b>COs</b>	<b>Course Outcomes:</b> Upon completion of the course, the students will be able to
<b>CO1</b>	Investigate and use conservational practices to protect natural resources.
<b>CO2</b>	Identify the causes of pollutants and illustrate suitable methods for pollution abatement.
<b>CO3</b>	Adapt the values of biodiversity and its conservation methods.
<b>CO4</b>	Recognize suitable sustainable development practices and apply it in day-to-day life.
<b>CO5</b>	Assess the impacts of human population and suggest suitable solutions.

### Induction Program

Induction Program	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
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## DEPARTMENT OF SCIENCE & HUMANITIES

### Course Outcomes – Odd semester - 2022 -23

### **B.E., - Electronics and Communication Engineering – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22PH102	Physics for Electronics Engineering
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EC101	Digital Principles and System Design
6	1	22HS101	Professional Communication
<b>LABORATORY COURSES</b>			
7	1	22ME111	Product Development Lab - I
<b>MANDATORY COURSES</b>			
8	1	22CH104	Environmental Sciences and Sustainability (Non Credit)
9	1		Induction Program (Non Credit)



## First Semester B.E., / ECE

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22PH102- Physics for Electronics Engineering	
<b>COs</b>	<b>Course Outcomes:</b> On completion of this course, the students will be able to
<b>CO1</b>	Discuss the basic principles of working of laser and their applications in fibre optic communication
<b>CO2</b>	Summarize the classical and quantum electron theories and energy band structures
<b>CO3</b>	Describe the conductivity in intrinsic and extrinsic semiconductors and importance of Hall effect measurements
<b>CO4</b>	Associate the properties of nanoscale materials and their applications in quantum computing
<b>CO5</b>	Explain the concepts of photovoltaic technology and its applications.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

<b>22CS102- Software Development Practices</b>	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

<b>22EC101- Digital Principles and System Design</b>	
<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the student will be able to
<b>CO1</b>	Implement digital circuits using simplified Boolean functions.
<b>CO2</b>	Realize Combinational circuits for a given function using logic gates.
<b>CO3</b>	Demonstrate the operation of various counters and shift registers using Flip Flops.
<b>CO4</b>	Analyze Synchronous Sequential circuits.
<b>CO5</b>	Summarize the various types of memory devices.
<b>CO6</b>	Design the Combinational circuits using Programmable Logic Devices.
<b>CO7</b>	Perform practical exercises as an individual and / or team member to manage the task in time.
<b>CO8</b>	Express the experimental results with effective presentation and report.

<b>22HS101- Professional Communication</b>	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Comprehend conversations and short talks delivered in English
<b>CO2</b>	Participate efficiently in informal conversations and develop an awareness of the self and apply well-defined techniques
<b>CO3</b>	Read articles of a general kind in magazines and newspapers efficiently
<b>CO4</b>	Write short general essays, personal letters and E-mails in English
<b>CO5</b>	Develop vocabulary of a general kind by enriching reading skills

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

22CH104 - Environmental Sciences and Sustainability	
<b>COs</b>	<b>Course Outcomes:</b> Upon completion of the course, the students will be able to
<b>CO1</b>	Investigate and use conservational practices to protect natural resources.
<b>CO2</b>	Identify the causes of pollutants and illustrate suitable methods for pollution abatement.
<b>CO3</b>	Adapt the values of biodiversity and its conservation methods.
<b>CO4</b>	Recognize suitable sustainable development practices and apply it in day-to-day life.
<b>CO5</b>	Assess the impacts of human population and suggest suitable solutions.

### Induction Program

<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.



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## DEPARTMENT OF SCIENCE & HUMANITIES

Course Outcomes – Odd semester - 2022 -23

**B.E., - Mechanical Engineering – - Odd semester**

### THEORY COURSES WITH LABORATORY COMPONENT

S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22PH103	Physics for Mechanical Engineering
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EE101	Basic Electrical, Electronics and Instrumentation Engineering
6	1	22HS101	Professional Communication
<b>LABORATORY COURSES</b>			
7	1	22ME111	Product Development Lab - I
<b>MANDATORY COURSES</b>			
8	1	22CH104	Environmental Sciences and Sustainability (Non Credit)
9	1		Induction Program (Non Credit)

## First Semester B.E., / MECH

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22PH103- Physics for Mechanical Engineering	
<b>COs</b>	<b>Course Outcomes:</b> On completion of this course, the students will be able to
<b>CO1</b>	Discuss the basic principles of working of laser and their applications to material processing
<b>CO2</b>	Comprehend the mechanical properties of matter and its measurement techniques
<b>CO3</b>	Describe the principles of working of various sensors and transducers
<b>CO4</b>	Explain the fundamentals of quantum mechanics and applications of Schrodinger's equations
<b>CO5</b>	Understand the basic properties of various materials and apply those knowledge on various applications thereby help in finding the solution for specific needs by design.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EE101-Basic Electrical, Electronics and Instrumentation Engineering

<b>COs</b>	<b>Course Outcomes:</b> After the completion of the course, students should be able to:
<b>CO1</b>	Understand concept of DC and AC electric circuits
<b>CO2</b>	Identify appropriate machine for a given application
<b>CO3</b>	Understand the working of electron devices
<b>CO4</b>	Demonstrate the concept of digital logic circuits
<b>CO5</b>	Choose appropriate transducers for specific application
<b>CO6</b>	Choose appropriate instruments for given application

### 22HS101- Professional Communication

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Comprehend conversations and short talks delivered in English
<b>CO2</b>	Participate efficiently in informal conversations and develop an awareness of the self and apply well-defined techniques
<b>CO3</b>	Read articles of a general kind in magazines and newspapers efficiently
<b>CO4</b>	Write short general essays, personal letters and E-mails in English
<b>CO5</b>	Develop vocabulary of a general kind by enriching reading skills

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

22CH104 - Environmental Sciences and Sustainability	
<b>COs</b>	<b>Course Outcomes:</b> Upon completion of the course, the students will be able to
<b>CO1</b>	Investigate and use conservational practices to protect natural resources.
<b>CO2</b>	Identify the causes of pollutants and illustrate suitable methods for pollution abatement.
<b>CO3</b>	Adapt the values of biodiversity and its conservation methods.
<b>CO4</b>	Recognize suitable sustainable development practices and apply it in day-to-day life.
<b>CO5</b>	Assess the impacts of human population and suggest suitable solutions.



### Induction Program

<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.



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## DEPARTMENT OF SCIENCE & HUMANITIES

Course Outcomes – Odd semester - 2022 -23

**B.E., - Computer Science and Design – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22CH101	Engineering Chemistry
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EC101	Digital Principles and System Design
LABORATORY COURSES WITH THEORY COMPONENT			
6	1	22ME202	Computer Aided Engineering Graphics
LABORATORY COURSES			
7	1	22ME111	Product Development Lab-1
MANDATORY COURSES			
8	1		Induction Program (Non Credit)

## First Semester B.E., / CSD

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22CH101- Engineering Chemistry	
<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the students will be able to
<b>CO1</b>	Interpret the water quality parameters and explain the various water treatment methods.
<b>CO2</b>	Construct the electro chemical cells and sensors.
<b>CO3</b>	Compare different energy storage devices and predict their relevance in electric vehicles.
<b>CO4</b>	Classify different types of smart materials, their properties and applications in Engineering and Technology.
<b>CO5</b>	Integrate the concepts of nano chemistry and enumerate its applications in various fields.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EC101- Digital Principles and System Design

<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the student will be able to
<b>CO1</b>	Implement digital circuits using simplified Boolean functions.
<b>CO2</b>	Realize Combinational circuits for a given function using logic gates.
<b>CO3</b>	Demonstrate the operation of various counters and shift registers using Flip Flops.
<b>CO4</b>	Analyze Synchronous Sequential circuits.
<b>CO5</b>	Summarize the various types of memory devices.
<b>CO6</b>	Design the Combinational circuits using Programmable Logic Devices.
<b>CO7</b>	Perform practical exercises as an individual and / or team member to manage the task in time.
<b>CO8</b>	Express the experimental results with effective presentation and report.

## Laboratory Courses with Theory Component

22ME202 - Computer Aided Engineering Graphics	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course, the students will be able to.
<b>CO1</b>	Explain the various engineering standards required for drafting and explore knowledge in conic sections.
<b>CO2</b>	Draw the orthographic views of 3D primitive objects.
<b>CO3</b>	Describe the projection of plane surfaces by the rotating plane method.
<b>CO4</b>	Apply the projection concepts and drafting tools to draw projections of solids.
<b>CO5</b>	Sketch the pictorial views of the objects using CAD tools.

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

Induction Program	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.



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## DEPARTMENT OF SCIENCE & HUMANITIES

### Course Outcomes – Odd semester - 2022 -23

### **B.Tech. - Artificial Intelligence & Data Science – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22CH101	Engineering Chemistry
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EC101	Digital Principles and System Design
LABORATORY COURSES WITH THEORY COMPONENT			
6	1	22ME202	Computer Aided Engineering Graphics
LABORATORY COURSES			
7	1	22ME111	Product Development Lab-1
MANDATORY COURSES			
8	1		Induction Program (Non Credit)

## First Semester B.Tech. / ADS

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22CH101- Engineering Chemistry	
<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the students will be able to
<b>CO1</b>	Interpret the water quality parameters and explain the various water treatment methods.
<b>CO2</b>	Construct the electro chemical cells and sensors.
<b>CO3</b>	Compare different energy storage devices and predict their relevance in electric vehicles.
<b>CO4</b>	Classify different types of smart materials, their properties and applications in Engineering and Technology.
<b>CO5</b>	Integrate the concepts of nano chemistry and enumerate its applications in various fields.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.



### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EC101- Digital Principles and System Design

<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the student will be able to
<b>CO1</b>	Implement digital circuits using simplified Boolean functions.
<b>CO2</b>	Realize Combinational circuits for a given function using logic gates.
<b>CO3</b>	Demonstrate the operation of various counters and shift registers using Flip Flops.
<b>CO4</b>	Analyze Synchronous Sequential circuits.
<b>CO5</b>	Summarize the various types of memory devices.
<b>CO6</b>	Design the Combinational circuits using Programmable Logic Devices.
<b>CO7</b>	Perform practical exercises as an individual and / or team member to manage the task in time.
<b>CO8</b>	Express the experimental results with effective presentation and report.

## Laboratory Courses with Theory Component

22ME202 - Computer Aided Engineering Graphics	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course, the students will be able to.
<b>CO1</b>	Explain the various engineering standards required for drafting and explore knowledge in conic sections.
<b>CO2</b>	Draw the orthographic views of 3D primitive objects.
<b>CO3</b>	Describe the projection of plane surfaces by the rotating plane method.
<b>CO4</b>	Apply the projection concepts and drafting tools to draw projections of solids.
<b>CO5</b>	Sketch the pictorial views of the objects using CAD tools.

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

Induction Program	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.



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## DEPARTMENT OF SCIENCE & HUMANITIES

### Course Outcomes – Odd semester - 2022 -23

### **B.Tech. - Computer Science and Business system – Odd semester**

THEORY COURSES			
S.No	Semester	Course code	Course Name
1	1	22MA102	Discrete Mathematics
2	1	22MA103	Introduction to Statistics, Probability and Calculus
<b>LAB INTEGRATED THEORY COURSES</b>			
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EE102	Principles of Electrical Engineering
6	1	22PH104	Fundamentals of Physics
<b>LABORATORY COURSES</b>			
7	1	22ME111	Product Development Lab-1
<b>MANDATORY COURSES</b>			
8	1		Induction Program (Non Credit)

## First Semester B.Tech. / CSBS

22MA102 - Discrete Mathematics	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	examine the validity of the arguments.
<b>CO2</b>	utilize the significance of Boolean algebra in computer science and engineering.
<b>CO3</b>	identify algebraic techniques to formulate and solve group theoretic problems.
<b>CO4</b>	demonstrate various proof techniques and application of principles.
<b>CO5</b>	apply graph theory techniques to solve real life problems.

22MA103- Introduction to Statistics, Probability and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	implement the concepts of basic statistics, find mean, median, mode, standard deviation, mean deviation, quartile deviation and range for a given data.
<b>CO2</b>	make use of probability concepts in problems of uncertainty.
<b>CO3</b>	identify and apply the discrete distributions concepts in real life problems.
<b>CO4</b>	apply the continuous distributions concepts by identifying in real life problems.
<b>CO5</b>	evaluate the problems using differentiation and integration.

## LAB INTEGRATED THEORY COURSES

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EE102- Principles of Electrical Engineering

<b>COs</b>	<b>Course Outcomes:</b> Upon completion of the course, the students will be able to:
<b>CO1</b>	Summarize the behavior electrical circuits
<b>CO2</b>	Solve the DC circuits using network theorems
<b>CO3</b>	Interpret the concepts of AC circuits
<b>CO4</b>	Discuss the electrostatic and magnetic fields with circuit laws and analyze the performance of transformers
<b>CO5</b>	Explain the various sensors and demonstrate electric wiring

### 22PH104 - Fundamentals of Physics

<b>COs</b>	<b>Course Outcomes:</b> On completion of this course, the students will be able to
<b>CO1</b>	Obtain solution of the oscillator using differential equation.
<b>CO2</b>	Analyze the intensity variation of light due to Polarization and interference
<b>CO3</b>	Explain fundamentals of electromagnetism and quantum mechanics and apply it in engineering problems
<b>CO4</b>	Find solution to thermal and electrical problems faced in computer devices.
<b>CO5</b>	Analyze working principle of lasers and to summarize its applications

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

Induction Program	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
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## DEPARTMENT OF SCIENCE & HUMANITIES

Course Outcomes – Odd semester - 2022 -23

**B.Tech. - Information Technology – Odd semester**

THEORY COURSES WITH LABORATORY COMPONENT			
S.No	Semester	Course code	Course Name
1	1	22MA101	Matrices and Calculus
2	1	22CH101	Engineering Chemistry
3	1	22CS101	Problem Solving using C++
4	1	22CS102	Software Development Practices
5	1	22EC101	Digital Principles and System Design
<b>LABORATORY COURSES WITH THEORY COMPONENT</b>			
6	1	22ME202	Computer Aided Engineering Graphics
<b>LABORATORY COURSES</b>			
7	1	22ME111	Product Development Lab-1
<b>MANDATORY COURSES</b>			
8	1		Induction Program (Non Credit)



## First Semester B.Tech. / IT

22MA101 - Matrices and Calculus	
<b>COs</b>	<b>Course Outcomes:</b> After the successful completion of the course, the student will be able to:
<b>CO1</b>	use the matrix algebra methods to diagonalize the matrix.
<b>CO2</b>	determine the evolute of the curve.
<b>CO3</b>	apply differential calculus ideas on the function of several variables.
<b>CO4</b>	evaluate the area and volume by applying the concept of multiple integration .
<b>CO5</b>	utilize the concept of vector calculus in evaluating integrals.

22CH101- Engineering Chemistry	
<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the students will be able to
<b>CO1</b>	Interpret the water quality parameters and explain the various water treatment methods.
<b>CO2</b>	Construct the electro chemical cells and sensors.
<b>CO3</b>	Compare different energy storage devices and predict their relevance in electric vehicles.
<b>CO4</b>	Classify different types of smart materials, their properties and applications in Engineering and Technology.
<b>CO5</b>	Integrate the concepts of nano chemistry and enumerate its applications in various fields.

22CS101 - Problem Solving using C++	
<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Solve problems using basic constructs in C.
<b>CO2</b>	Implement C programs using pointers and functions.
<b>CO3</b>	Apply object-oriented concepts and solve real world problems.
<b>CO4</b>	Develop C++ programs using operator overloading and polymorphism.
<b>CO5</b>	Implement C++ programs using Files and exceptions.

### 22CS102- Software Development Practices

<b>COs</b>	<b>Course Outcomes:</b> At the end of this course, the students will be able to:
<b>CO1</b>	Apply agile development methods in software development practices.
<b>CO2</b>	Set up and create a GitHub repository.
<b>CO3</b>	Develop static and dynamic webpages using HTML.
<b>CO4</b>	Design interactive personal or professional webpages using CSS.
<b>CO5</b>	Develop web pages using Java script with event-handling mechanism.

### 22EC101- Digital Principles and System Design

<b>COs</b>	<b>Course Outcomes:</b> On successful completion of this course, the student will be able to
<b>CO1</b>	Implement digital circuits using simplified Boolean functions.
<b>CO2</b>	Realize Combinational circuits for a given function using logic gates.
<b>CO3</b>	Demonstrate the operation of various counters and shift registers using Flip Flops.
<b>CO4</b>	Analyze Synchronous Sequential circuits.
<b>CO5</b>	Summarize the various types of memory devices.
<b>CO6</b>	Design the Combinational circuits using Programmable Logic Devices.
<b>CO7</b>	Perform practical exercises as an individual and / or team member to manage the task in time.
<b>CO8</b>	Express the experimental results with effective presentation and report.

## Laboratory Courses with Theory Component

22ME202 - Computer Aided Engineering Graphics	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course, the students will be able to
<b>CO1</b>	Explain the various engineering standards required for drafting and explore knowledge in conic sections.
<b>CO2</b>	Draw the orthographic views of 3D primitive objects.
<b>CO3</b>	Describe the projection of plane surfaces by the rotating plane method.
<b>CO4</b>	Apply the projection concepts and drafting tools to draw projections of solids.
<b>CO5</b>	Sketch the pictorial views of the objects using CAD tools.

## Laboratory Courses

22ME111 - Product Development Lab - I	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the course the students will be able to do
<b>CO1</b>	Understand the concept of manufacturing processes.
<b>CO2</b>	Describe the working of the machine element.
<b>CO3</b>	Discuss the various applications of engineering materials
<b>CO4</b>	Summarize the basics of core engineering concepts.
<b>CO5</b>	Describe the process for converting ideas into products

## Mandatory Courses

Induction Program	
<b>COs</b>	<b>Course Outcomes:</b> After successful completion of the Students Induction Program (SIP), the students will be able to
<b>CO1</b>	facilitate a smooth transition from their school environment into the college environment, and have a better understanding of their peers and faculty members.
<b>CO2</b>	approach faculty mentors when facing any academic, financial, and psychological problems through the well-structured Mentor Mentee network.
<b>CO3</b>	feel comfortable in the new environment and adjust to the customs and practices of the college and instil the ideas, practices and spirit of the college and its unique features.
<b>CO4</b>	understand the different aspects (SAGE) of Socializing, Associating, Governing and Experiencing.
<b>CO5</b>	get an idea of 21 <sup>st</sup> century technical education and career opportunities, through various talks and industrial experts.