



SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA (SCSVMV)

(Deemed to be University u/s 3 of the UGC Act 1956) (Accredited with 'A' Grade by NAAC) Enathur, Kanchipuram - 631 561.

VALUE ADDED COURSES

Course Title	Internet of Things (IoT)
Faculty	Engineering/Computer Science
Beneficiaries	UG Students
Course Objective	This Course focuses on IoT concepts such as sensing, actuation and communication. It covers the development of Internet of Things (IoT) prototypes—including devices for sensing, actuation, processing, and communication—to help you develop skills and experiences. The Internet of Things (IOT) is the next wave, world is going to witness. Today we live in aNuclearn era of connected devices the future is of connected things.
Course Outcome:	Design IoT based Prototypes

S. No	Course Content	Hours
1	Introduction to IoT: Understanding IoT fundamentals - IOT Architecture and protocols- Various Platforms for IoT- Real time Examples of IoT - Overview of IoT components and IoT Communication Technologies- Challenges in IOT	8
2 -	Sensors and Actuators: Overview of Sensors working- Analog and Digital Sensors- Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino- Interfacing of Actuators with Arduino.	8
3	Basic Networking: Basics of Wireless Networking-Introduction to ESP8266 Wi-Fi Module- Various Wi-Fi library- Web server-introduction, installation, configuration	4
4	IoT Protocols: M2M vs IoT – Communication Protocols	4
5	Cloud Platforms for IoT - Virtualization concepts and Cloud Architecture- Cloud computing, benefits- Cloud services SaaS, PaaS, IaaS- Cloud providers & offerings- Study of IOT Cloud platforms	8
Total Ho	purs	32

Dr.G. SRIRAM, M.E., Ph.D.,
Professor of Mechanical Engineering
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Course Title	Soft Skills 3	
Faculty	Engineering	
Beneficiaries	UG Students	

S. No	Course Content	Hours
	QUANTITATIVE ABILITY	
1	Simple equations including problems Related to ages, fractions, digits etc.	30
2	Ratio and Proportion and Averages	
3	Percentages	
4	Profit and Loss, Partnerships	
5	Averages, Mixtures, Alligations	
6 .	Numbers, Number System	
7	Mensuration	
8	Permutation and Combination	
9	Probability	
10	Progressions	
	REASONING	
1	Cubes, Clocks and Calendars	
2	Number Series and Number Sequences	
3	Non Verbal Reasoning	
4	Blood relations, Directions, Coding, Binary Logic	
5	Games & Puzzles	
	Total Hours	30

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Course Title	Soft Skills 4
Faculty	Engineering
Beneficiaries	UG Students

S. No	Course Content	Hours
	QUANTITATIVE ABILITY	30
1	Numbers – Test of Divisibility, Square roots etc.	
2	Ratio Proportion, Variation	
3	Averages Mixtures Allegations, Percentage, Profit and Loss, Partnership	
4	Time & Work, Pipes and Cisterns	
5	Time and Distance including problems on Trains, Boats, Races etc.	
6	Geometry, Mensuration	
7	Permutations & Combinations, Probability	
	REASONING	
8	Logical Ability Basics – Number, Letter Series, Odd man out, Distribution, Binary Logic	
9	Logical Ability Basics - Puzzles, Games, Arrangements etc.,	
10	Clocks & Calendars – Basics through handouts, Cubes & Venn Diagrams-Basics through handouts	
11	Data Sufficiency	
12	Data Interpretation	
1	VERBAL ABILITY	
13	Vocabulary-Synonyms, Antonyms, Analogies, Idioms & Phrases etc.	
14	Error Correction Exercise	
15	Resume Writing	
Total Ho	ours	30

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Course Title	Nanotechnology
Faculty	Science
Beneficiaries	UG Students

S. No	Course Content	Hours
1	History of Nano science, definition of Nano meter, Nano materials, Nano technology. Classification of Nano materials. Crystal symmetries, crystal directions, crystal planes. Band structure	6
2	Mechanical properties, electrical properties, dielectric properties, thermal properties, magnetic properties, opto electronic properties. Effect of size reduction on properties, electronic structure of Nano materials.	6
3	Synthesis of bulk polycrystalline samples, growth of single crystals. Synthesis techniques for preparation of Nano particle – Bottom Up Approach – sol gel synthesis, hydro thermal growth, thin film growth, PVD and CVD; Top Down Approach – Ball milling, micro fabrication, lithography. Requirements for realizing semiconductor Nano structures, growth techniques for Nano structures.	6
4	X-Ray diffraction and Scherrer method, scanning electron microscopy, transmission electron microscopy, scanning probe microscopy, atomic force microscopy, piezo response microscopy, X-ray photoelectron spectroscopy, XANES and XAFS, angle resolved photoemission spectroscopy, diffuse reflectance spectra, Photo luminescence spectra, Raman spectroscopy.	6
5	Applications in material science, biology and medicine, surface science, energy and environment. Applications of Nano structured thin fins, applications of quantum dots	6
Total Ho	ours	30

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(Deemed to be University u/s 3 of the UGC Act 1956) (Accredited with 'A' Grade by NAAC) Enathur, Kanchipuram - 631 561.

Course Title	Introduction to Web Technology and Mobile Application Development
Faculty	Engineering/Computer Science
Beneficiaries	UG Students

S. No	Course Content	Hours
1 ~	Introduction to HTML – tags – frames – paragraph – table - elements – images – links and hyperlinks – adding text boxes into frames	8
2	Creating a simple login form - Introduction to DHTML - tags - color palette - text - text highlighting - setting up attributes in the table and frame	8
3	Creating a simple webpage and website – adding dynamic contents to the web page – building forms at run time – creating a simple calculator	4
4	Introduction to mobile apps- Android – MAC OS– using simple tools to create online mobile apps.	4
5	Case studies: Android App. For any real-time application and implement it on mobile. A simple web page or website for any real time application.	8
Γotal Hoι	ırs	32

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Course Title	Robotics	
Faculty	Engineering/Computer Science	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	Introduction to Robotics: Brief history and need for robotics - Definition and Law of Robotics - Overview of past, present and Future of Robotics trends - Classification, Types and Applications of Robots - Key components of Robots - Sensors, Actuators, Controllers, User Interface, Manipulators, Linkage, Power conversion units, Servo and Stepper motors, Manipulators and Robots arms and grippers, Robot Languages and Software's	8
2	Fire Bird V ATMEGA2560 Robot: Introduction to Firebird robots - Fire Bird V Block Diagram - Fire Bird V ATMEGA2560 technical specification - identifying and fixing internal and external interfaces (ports) and devices - identifying communication ports and modes - Software installation and configuration - powering up and down - safety precaution.	8
3	Basic I/O and Sensor Programming: I/O Interfacing – Buzzer-Beep – LCD interfacing- Timer and Interrupt programming - ADC and DAC - need for sensors – Sensors available in FireBird V – converting sensor value to digital values – sensor switching programming	4
4	Motion Control Programming: DC and AC stepper and servo motors - Types - Types of robot Motion - Object following and avoidance - Path planning - Straight Line motion - white line and black line following robot - skew motion - Robot velocity and position control Programming	4
5	Serial Communication and Robot End Effectors: Types of communication – Serial communication ports – USB- RS232 – ZigBee- Wireless communication and programming example – Classification of end effectors – Gripper systems – Mechanical-adhesive-vacuum-magnetic grippers- active and passive gripper-programming example- servo motor control using PWM	8.
Total Ho	urs	32

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Course Title	Cloud Computing	
Faculty	Engineering	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	Introduction to Cloud Computing- Definition of Cloud- Evolution of Cloud Computing -Underlying Principles of Parallel and Distributed Computing Cloud Characteristics	6
2	Cloud Enabling Technologies: Service Oriented Architecture – REST and Systems of Systems-Basics of Virtualization-Types of Virtualization-Implementation Levels of Virtualization	6
3	Cloud Architecture, Services and Storage: Layered Cloud Architecture Design-NIST Cloud Computing Reference Architecture-Architectural Design Challenges-Cloud Storage- Advantages of Cloud Storage	6
4	Resource Management and Security in Cloud: Inter Cloud Resource Management-Resource Provisioning and Methods – Global Exchange of Cloud Resources-Security Governance- IAM-Security Standards	8
5	Cloud Technologies and Advancements: Hadoop – Map Reduce- Virtual Box-Google App Engine – Programming Environment for Google App Engine – Federation in Cloud – Levels of Federation- Future of Federation	6
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Course Title	Business Administration	
Faculty	Management Studies	
Beneficiaries	UG Students	

S. No Course Content	Hours
Meaning, Characteristics, Formation and merits and demerits of the following terms: Sole Proprietorship, Partnership, Joint Stock Company, Co-Operative Society, Public Enterprise, Non-Profit Organization	8
Evolution of Management Thought: Management in antiquity. Management in the Pre-Taylor period. Impact of Industrial Revolution on Management. The advent of scientific management Nineteenth Century contributions. The Beginning of Scientific epoch in management. Taylor's philosophy in the scientific method. Gantts Philosophy of humanity in industry: Emersons philosophy of efficiency Gilbreth's Philosophy of the one best way.	8
Evolution of Management Thought: School of Management Theory: 1) The Classical School including: Scientific Management School (Taylor & His followers) Management Process School (Fayol, Follet, Gillick, Urwick) Bureaucracy Theory School (Max Weber) 2) The Human Relations School (Neo Classical): Hawthrone Experiments by Elton Mayo 3) The Contingency Theory School	8
Objective & Social Responsibilities of Business. Goals of business-concept & Nature of Objective, Importance of Objectives. Types of Objectives, Balancing the Objectives MBO. The Social Responsibilities of business. Areas of Social Obligation. Classification of social responsibility, Problem of Change. Recommendations for Environmental Planning	8
Total Hours	32

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Course Title	Fuel Cells and Batteries
Faculty	Science
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Electrochemistry for energy production and storage: Electrochemistry definition-Basic terminology-electrolytic and electrochemical cells – galvanic cells- electrodes-SRP-hydrogen scale-electrochemical series-applications-emf of a cell-relationship between emf and ΔG , K-factors affecting emf of a cell-Nernst equation.	8
2	Equivalent circuits for a cell-variation of current in a cell-electron transfer in a cell-kinetics of electrode processes-Butler-Volmer equation-Tafel equation -uses of the equations-Mass transport Electro analytical methods – need for them – voltammetry – linear sweep and cyclic voltammetry-information's from CV profile – impedance spectroscopy – uses (principles only)	8
3	Fuel Cell – definition – history of fuel cell – types – components of fuel cells – reactions occurring in different types. PEM fuels cells-proton conducting membrane – electrodes and electrocatlysts – MEA – Optimization of composition and structure of MEA- methods for preparing catalyst layers-challenges in PEM cells – rectification methods – bipolar plates – types -water management in fuel cell-scale up issues – fuel cell stacks – real time applications of fuel cells.	8
4	Batteries—definition-general characteristics of batteries—factors affecting performance of a battery—international standards for batteries-nomenclature—regulatory and safety standards-general design of a battery-smart batteries-battery selection. Construction and Working of Silver Oxide-lead acid, Li ion battery, Zn-Cd, Ni metal hydride batteries. Recent developments in battery technology-Super capacitors (Introduction Only)	8
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Course Title	Human Resource Management	
Faculty	Management Studies	7
Beneficiaries	UG Students	

HRM – Introduction – Meaning – definition-nature and scope of HRM and HRD-evolution of HRM – HRM functions – qualities of HR – factors influencing HRM – Opportunities and Challenges in Human Resource Management-HR planning – Introduction – Objectives of HRP – linkage of HRP to other plans – definition and need for HRP – benefits of HRP – factors affecting HRP process-problems and limitations of HRP Training-An Introduction – Applications of training – Types of training – Assessment of behavior (analysis) – Competency	12
Training - Assessment of behavior (analysis) - Competency	10
mapping methods – Individual – Group -Human Resource Development Techniques-Counselling skills – Human Resource Management Techniques – Behavioral Management Skills – Performance Counselling – Stress Management skills – Negotiation skills – Communication Skills – Leadership Training role play – Conflict resolution skills – Personal Values and Work Values – Socialization-Performance Ethics and Legal issues	
Performance Management: Introduction – meaning -need-purpose-objectives-contents of PA's -appraisers and different methods of appraisal – uses of performance appraisal-limitations and problems of performance – understanding the Organisation-Organisational Structure – group behaviour – Power – Politics and Status – The environment of Human Relations and Specific Challenges – Organizational Communication: Influencing other – Understanding Change	
LIT	30

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Course Title	Astro Physics
Faculty	Science
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Interstellar Matter, Galaxies and other Astronomical Objects: Surface features of the sun – Galaxies-composition of the galaxies and its properties-Types of galaxies-Regular galaxies, irregular galaxies, spiral galaxies-Hubble's tuning fork diagram for the classification of galaxies	10
2	Instrumentation facilities: Hubble telescope – Apache point observatory for observing the stationary and moving objects – SDSS sky survey-Data releases from SDSS – Surface features of the sun-CCD Camera-Different types of filters-red, green, ultra violet, infra-red and far infra-red. SDSS telescopic dome – Different types of telescopes present in SDSS survey	10
3	Application of Astrophysics-Image Processing: Image-Analyzing an image-various process involving in analyzing a image – Forming tricolor images -3D view of an image – color paletes – Inverting the color paletes- Isophotic view of an image – logarithmic scaling for an image.	10
Total Ho	Durs	30

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Course Title	Chemistry in Crime Investigation	
Faculty	Science	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	Basics of forensic science: Introduction to forensic science – time line of forensics – divisions of forensics – latest techniques used. CSI – crime scene – Locard's principle – limitations – preservation of crime scene – recording the scene – forensic photography - search patterns – value of trace evidences – list of possible trace evidences.	10
2	Physical & Trace evidences: Finger prints –individuality – pattern classification – latent prints – developing the latent prints – chemical and physical methods – foot prints – location and preservation- collection of foot prints – Gait pattern – deductions from walking pattern. Trace evidences – hairs – fibers – blood – semen – soil – dirt – tyre marks- skid marks- glass –paints	10
3	Forged documents – types of forgery - detection - counterfeit currencies – hand writing analysis – factors affecting hand writing – erasures- alterations – additions – obliterations – order of writing – age of writing. Forensic toxicology – alcohol – blood alcohol level- drugs – narcotics – poisons – toxins – methods of identifications. Arson cases- detection of residual fuel – firing pattern analysis.	10
Total Ho		30

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Course Title	Basic in Bio-informatics	
Faculty	Science	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	DNA and Protein Databases: Understanding DNA and protein sequences-DNA and protein databases – preliminary level analysis of DNA and protein sequences using bioinformatics tools. Examples of related tools, databases and software. Applications of Bioinformatics	10
2	Protein Structural databases: Biological database and its types Introduction to data types and source. General Introduction of Biological Databases; Nucleic acid databases. Protein databases, specialized genome databases, structure databases	10
3	Protein Structure: Protein Structure: Primary, Secondary, Tertiary, Quaternary, Ramachandran plot.	10
Total Ho	ours	30

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Course Title	Finance for Non-Financial Managers	
Faculty	Management Studies	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1 ~	Three basic finance principles – basic finance terms – understanding the meaning of transactions and events – meaning of accounting – subfields of accounting	10
2	The general Journal – ledger – Balance Sheet – The income statement – cash flow statement	10
3	Understanding budgets – approaches to budgeting - minimum, target and stretch budget – reading the budget	10
Total Ho		30

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Course Title	BIM Using Autodesk Revit
Faculty	Engineering
Beneficiaries	UG Students

S. No	Course Content	Hours
1 .	Introduction to Building Information Modeling: The Mental Transition to BIM, Content Hierarchy, Understanding Parameters, Attributes and Constraints Standard Formats	4
2	Revit Architecture Basic: Exploring the User Interface, Working with Revit Elements and Families, Starting a Project, Starting a Design, Creating and Modifying Levels, Creating and Modifying Grids	4
3	The Basics of the Building Model: Creating a Basic Floor Plan, Adding and Modifying Walls, Adding and Modifying Doors and Windows	4
4	Loading Additional Building Components: Working with Component Families	4
5	Viewing the Building Model: Managing Views, Controlling Object Visibility, Working with Section and Elevation Views	4
6	Using Dimensions and Constraints: Working with Dimensions, Applying and Removing Constraints	4
7	Developing the Building Model: Creating and Modifying Floors, Working with Ceilings, Adding Stairs and Railings	4
8	Detailing and Drafting: Creating Callout Views, Working with Drafting Views	4
9	Construction Documentation: Creating and Modifying Schedules, Creating Rooms and Room Schedules, Creating Legends and Keynotes	4
10	Presenting the Building: Working with Drawing Sheets, Managing Revisions, Creating Renderings, Using Sun and Shadow Settings	4
Total Ho	urs	40

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Course Title	Industrial Robots and Applications
Faculty	Engineering
Beneficiaries	UG Students
Course Objective	To train the students in designing and practical implementation of hydraulic and pneumatic circuits using ladder diagram.
	To acquire knowledge on simulation principles using automation software. To acquire knowledge in the concept of programming the multi axis robot.

S. No	Course Content	Hours
1	Forward kinematics and validate using a software (Robo Analyzer or any other open source software)	30
2	Inverse Kinematics of the real robot and validation using a software (Robo Analyzer or any other open-source software)	
3	Positioning and Orientation of robot arm	
4	Kinematic simulation using MATLAB robotic tool box	
5	Dynamic simulation using MATLAB robotic tool box	
6	Design and control of mobile robot	
7	Design and control of wall climbing robot	
8	Programming and control of multiaxis robot for pick and place the object	
Total Ho	ours	30

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Course Title	SCADA Programming	
Faculty	Engineering	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	Creating & Configuring a Project	30
2	Setting up communication with PLCs	
3	Creating and Configuring Tags, Graphic Displays	
4	Alarms, Activity log and Data Logging	
5	Creating expressions, Key definition Control	
6	Events & Trends	
7	Configuring Startup settings & Testing the project	
Total Ho	ours	30

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Course Title	Thermal Power Plant Engineering	
Faculty	Engineering/Mechanical & Mechatronics	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	Introduction to thermal power plant & Switchyard layout and Description of Switchyard equipment	6
2	Boiler and Auxiliaries of Thermal Power Plant	6
3	Turbine & Auxiliaries of Thermal Power Plant	8
4	Generator & Auxiliaries of Thermal Power Plant	8
Total Ho	purs	28

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Course Title	Training program on PLC and SCADA
Faculty	Engineering/Mechanical
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Introduction to Automation,	4
2	Introduction to PLC	4
3	Introduction to PLC Programming Concepts	4
4	Introduction to Delta PLC	4
5	Practical Exposure on Delta PLC/Advanced Instructions	4
6	Introduction to SCADA	4
7	Concepts of SCADA	4
8	Practical Exposure on SCADA Software	4
9	Advanced Instructions in SCADA	4
10	Coding in SCADA	4
Total Ho	ours	40

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Course Title	Nuclear Physics
Faculty	Engineering
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Radio Active Decays: Nuclear size-mass-charge-binding energy, nuclear stability, nature of nuclear forces. Alpha emission-beta emission-gamma emission. Nuclear isomerism-basic principle of particles detector-ionization chamber-proportional counter and GM counter. Scintillation and semiconductor detectors	10
2	Nuclear Model, Accelerators and Reactors: Liquid drop model- shell model-magic numbers-collective model-cyclotron- betatron-synchrotron-Linear accelerators. Characteristics of fission-energy in fission-fission reactors-basic fusion process- controlled fusion reactors	10
3	Elementary Particles: Building blocks of nucleous-nucleons- leptons-baryons-hyprons-hadrons and strange particles	10
Total Ho	ours	30

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(Deemed to be University u/s 3 of the UGC Act 1956) (Accredited with 'A' Grade by NAAC) Enathur, Kanchipuram - 631 561.

Course Title	Sanskrit and Indian Culture
Faculty	Engineering
Beneficiaries +	UG Students
Course Objective	The course provides an introduction and understanding about Sanskrit and the elements of ancient Indian Culture. The objective of the course is to make students to get an idea about the significance of Sanskrit Language, introduction to Vedic Literature, the Vedangas, Epics, Sanskrit Poets and their works and System of Indian Philosophy, Indian Culture, Ancient Scripts and Languages, Human Responsibilities, Ancient Scientific thoughts of India etc to impart the basic knowledge to all the students to foster the spirit of belongingness and patriotic fervor.

S. No	Course Content	Hours
1	An introduction to Sanskrit Language – Meaning and definition, Glory of Sanskrit Language, Introduction to Vedic literature (origin of Vedas, Classification of Vedas, Upavedas and Vedangas, Introduction to Epics and Puranas.	8
2	Introduction to Classical Sanskrit Literature – Introduction to Poets in Sanskrit and their works, Introduction to System of Indian Philosophy-Stories from Panchatantra and Hitopadesa, Message of Paramacharya	8
3	Cultural Heritage of India- Introduction to Sindh Vedic Culture-Significance and How it is different from the other cultures. Whey we have to follow? Important features, Early Indian Education-Significance and advantages. Gurukulas and Guru-Sishya Parampara. Learning methods. Important early educational centers-Ghattikas, universities and their unique features.	8
4	Duties and responsibilities of human -Samskaras or Sacraments - Social Significance of religion	8
5	Scientific Heritage of India – Important personalities and their Contributions – Introduction to Arthasastra – Introduction to Ancient Sciences and Scientific heritage	8
Total Ho		40

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Course Title	Soft Skills 1	
Faculty	Engineering	
Beneficiaries •	UG Students	

S. No	Course Content	Hours
1	Importance of developing Communication Skills	30
2	Common Errors in Spoken English	
3	Error Correction Exercises	
4	Thumb Rules in English Grammar	
5	Grammar Exercises Related to Nouns, Verbs and Articles	
6 .	Reading Comprehension-Sentences, Paragraphs & Passages	
7	Effective Communication Skills Good Vocabulary & Basic Grammar	
8	Subject Verb Agreement	
9	Vocabulary-Synonyms and Antonyms	
10	Writing Essays, Reports etc	
11	Conversations in Day to Day Life	
12	Story development from hints	
13	Speaking Exercises (Each Student to speak for 3 minutes)	
14	Spelling Exercise & Punctuation	
15	Pronunciation	
Total Hor	urs	30

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Course Title	Soft Skills 2	
Faculty	Engineering	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	Introduction & Importance of Communication	30
2	Written Communication Skills including Email & Etiquettes	
3	Spoken English Communication Skills & Telephone Etiquettes	
4	Grammar Exercises Related to Pronouns	
5	Grammar Exercises Related to Adjectives & Adverbs	1
6	Grammar Exercises Related to Prepositions & Conjuction	
7	Grammar Exercises Related to Articles	
8 -	Common Errors in Every day English Usage	
9	Verbal Basics-Grammar, Vocabulary, Reading Comprehension	
10	Spellings & Punctuation	
11	Idioms and Phrases	1
12	Phrasal Verbs	
13	Grammar Exercises Related to Articles	
14	Hints on Effective Writing	
15	Quiz on Vocabulary	
Total Ho	urs	30

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Course Title	Psychology
Faculty	Science
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Introduction to Psychology-Definition, branches of psychology. Methods of psychology: Introspection, Case Study, Observation and Experimental methods. Adolescent	6
2	Memory and Forgetting: Concept of Memory and Forgetting. Types of Memory: Short-term and long-term memory. Forgetting: Phenomena of forgetting, how to overcome forgetting	6
3	Abnormal Psychology: Psychosis, Neurosis, Tension, worry, Emotional Disturbances, Obsessive compulsive disorder (OCD) - Autism, Mental Retardation, Cerebral Palsy, Attention Deficit Hyperactivity Disorder - (ADHD), Sleeping disorders-Somnambulism, Insomnia and Hypersomnia. Dreams, Possession Syndrome, Illusion, Delusion and Hallucination. Extrovert, Introvert and Ambivort.	6
4	Stress Management: Stress, Stressor and types of stressors - External and Internal Stressors - Types, causes, symptoms and effects of stress -Recognizing the problem and Benefits of stress management - Conflict management	6
5	Assessment of personality, contributions of the Sigmund Freud to the Personality - Iceberg theory - Dynamic aspects (id, ego and super ego) - Economic aspects (Eros and thanatos) - Topographic aspects (conscious, subconscious, unconscious - Defense mechanisms - Classification of personality	6
Total Ho		30

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Course Title	PLC Based Automation
Faculty	Engineering
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Programming basic logic gate operations.	30
2	Programming Timers and Counters.	
3	Programming using compare instructions	
4	Programming data manipulation instructions.	
5	Programming program control instructions	
6	Programming Math instructions.	
7	Programming Sequencer instructions	
8	Programming a PLC to Control bottle filling system.	
Total Ho	ours	30

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श्रीचन्द्रशेखरेन्द्रसरस्वतीविश्वमहाविद्यालयः (विश्वविद्यालयानुदानायोगस्य 1956 नियमे तृतीयविधिमनुसूल्य संस्थापितः विश्वमहाविद्यालयः)

एनालूर्, काञ्चीपुरम् - 631561

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Course Title	Japanese	
Faculty	Engineering	
Beneficiaries	UG Students	

S. No	Course Content	Hours
1	➤ Hiragana	06
	▶ Katakana	700.00
	➤ Self Introduction & Greetings	
2	➤ Demonstrative Nouns,	12
	➤ Kore/sore/are; kono/sono/ano	
	Conversation: Kore Wa hon no Kimochi desu	
	Demonstratives indicate place	
	Conversation: Kore o Kudasai	
	➤ Time/Introduction to Verbs	
	Conversation: Ima Nan-ji desu ka	
	Verbs indicate movement	
	Conversation: Kono Dnsha wa koushien made ikimasu ka	
3	> Transitive Verbs	12
	Conversation: Issho ni ikimasen ka	
	> Transitive Verbs	
	Conversation: Issho ni ikimasen ka	
	> Action Particle; Verbs - Giving & Receiving	
	Conversation: Irasshai	
4	> Adjectives	12
	Conversation: soro soro shitsureishimasu	0322
	> Adjectives	
	Conversation: soro soro shitsureishimasu	
	> Special Adjectives:	
	Suki, Kirai, Jouzu, heta	
	Conversation: Zannen desu ga	
5	> Counters	06
	How to count small objects, people, machine and vehicles and flat	
	objects, age,	
	Conversation: Kore, Onegaishimasu	
	Revision of all lessons	
Total H	ours	48

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Course Title	German Primer	11/24/25/24/30
Faculty	Engineering	
Beneficiaries	UG Students	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

S. No	Course Content	Hours
1	General Conjugation of Verbs in Present Tense, Masculine/Feminine gender, Singular/Plural, Simple negation, Agreement of Nouns and Adjectives, asking questions using What? Where? (Est-ce que, Quest-ce-Qu'est-ce: quec'est, Ou) asking questions using which? (Quel/quetle, quells, quelles), Definite/indefinite articles, Imperative mood. Conjugation of Irregular verbs (faire, aller, venir, vouloir, pouvair, devoir), Immediate future tence, Personal Pronous: moi, toi, lui, ellc. etc. Past perfect tense (pusse compose), Prepositions for telling the date and the time	12
2	Simple Comparison, Demonstrative Adjectives, Possessive Adjectives, Conjugation of irregular verbs take (prendre)-put(mettre) Partitive Articles m/f (du, de la), Using articles, asking questions (using inversion), Replies: Yes (oui-si); no(non), Possessive form (Belonging to + pronoun), Pronominal verb Conjugation, Imperative mood, Expression of quantity: little, a little, some etc (peu-un peu de-queique – etc.) Prepositions and adverbs of place, Verbs expressing movement (use of prepositions), Ordinal number adjectives, Conjugation: to come, to leave, to go out (venir, partirm sortir)	12
3	Past Imperfect tense, Uses of the past perfect and imperfect tenses (passe compose, imparfoit), Expression of duration, Connecting Ideas, The sense of mutuality. Direct object pronouns, Indirect object personal pronouns, Expression of frequency and repetition, Expression of sequence of action: past perfect (passe compose), recent past (passe recent), present continuous (present progressif), future proche, complete/ incomplete action. Reported Speech, Relative Clauses The place of the adjective, Final relative clause with Who, which, that), C'est/il est (This is, it is, he is, she is) Imperative mood of verbs with pronouns Word Formation	12
Total H	POURON DE PROGRAMA	

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Course Title	French Primer
Faculty	Engineering
Beneficiaries	UG Students

S. No	Course Content	Hours
1	Salutations Usage <i>de tu et de vous:</i> Saluer, Prendre Conqe, Se presenter Demander/Donner des information's personnelles.	
2	Les numeros de telephone en France: Demander Poliment, Demander/Donner des informations personells, Demander le prix de quelque chose	
3	Donner des informations personnelles, Indiquer ses qouts, Parler de ses passions, de ses reves	
4	La ville: Parler de sa ville, Nommer et localizer des lieux dans la ville Demander/ Donner des explications.	
5	Auberges de jeunesse et hotels: S informer sur un hebergement, Remercier/Repondre a un remerciement, Comprendre/indiquer un itineraire simple Le code postal et les departements Le libelle d'une adresse en France: Ecrire une carte postale Donner ses impressions sur un lieu.	3
6	Les animaux de compagnie Les animaux prefers des Français, Nouveaux modes de rencontres, Les sorties	3
7	Rythmes de vie et rythmes de la ville La television dans la vie quotidienne, Routine/Changement, rupture de rythme Vie de famille et taches menageres, Las Principales fetes en France.	
8	Faire-parts et evenements familiaux, Conversations telephoniques Le marriage, la famille, les familles recomposes, La vie des celèbrites, Le(s) plus grands Français de tous les temps	3
9	Les saisons, le climate Montreal, Les departements et territories d'outre-mer, La Reunion, Activities culturelles a Bruxelles, capitale europeenne	3
10	La Semaine du Gout Les habitudes alimentaires, La mode, l'image personnelles, Les occasions de cadeaux,	3
11	Les achats de consummation courante et les moyens de palement, Les spectacles et la reservations au theatre, Critiques de restaurants.	3
12	Souvenirs d'enfance Les neo-ruraux, Les preferences des Français concernant leur maison, La colocation	3
13	Differences culturelles et quiproquos Savoir-vivre en France et en Europe	3
Total H	fours	36

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