



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

**ADMISSIONS OPEN**

FOR

**COC COURSE IN ELECTRICAL & ELECTRONIC  
EQUIPMENT MAINTENANCE**

**(UGC SPONSORED)**

## OBJECTIVES:

- To train, upgrade and increase technical competence of students to repair different domestic electronics appliances.
- Repair and maintenance & installation of electronics equipments.
- To impart necessary skills to be enterprising and self-reliant.

## SCOPE:

- After completion of the course students can choose to work in industrial, commercial or residential electricity. They are eligible to work as:
  - Electronic equipment technician
  - Electrical appliance repair technicians.
  - Domestic appliance repairer
  - Laboratory technician
- Can evaluate electrical systems, products, components, and applications by applying knowledge of electricity and materials.

## RELEVANCE:

- The course in Electrical & Electronic Equipment Maintenance prepares the students for career in the technical industry. Students gain the knowledge and skills for job acquisition by studying theory in the classroom and participating in practical application through labs.
- There is growing demand for electricians/ maintenance technician because of the rise in new construction projects and the need to maintain older equipment.

## SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

## OUTCOMES OF COCS

- Understand the basics of circuit control and protective devices in electrical circuits
- Classify and compare different types of Electrical wiring
- Analyze various circuits viz. Rectifiers, Voltage Regulators
- Understand and build basic digital circuits

*For more information, Contact : The Head, Dept. of Electronics*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC COURSE IN INDUSTRIAL MICROBIOLOGY (UGC SPONSORED)

### OBJECTIVES:

- To enhance problem-solving skills of students through industry oriented projects.
- To highlight the importance of microorganisms in the production of useful products.
- This course aims to enable graduates to enter industry with an appropriate level of understanding the need for both the science and business to make a viable product.

### SCOPE :

- Employment record shows that Industrial Microbiology has a great scope in future. Industrial Microbiologists can find careers with pharmaceutical companies, chemical, agriculture and allied industries.
- They can be employed in the areas of Project manager, Food and Hygiene quality controller, Training Scientific officers.

### RELEVANCE:

- The course is designed to develop the ability of a student to apply the techniques used in the different phases of industrial microbiology: discovery, production (including fermentation and scale-up), bioprocessing.
- It includes the use of microorganisms in the industrial production of foods, pure chemicals, proteins and other useful products, including the use of genetically modified organisms.
- Helps the students to understand ethical and commercial issues such as patenting, microbial investigations and data evaluation.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Gain basic knowledge about Industrial Microbiology starting from history and learn the over view of scope and importance of industrially important microbes
- Gain skills of isolation, culturing, strain improvement and maintenance of pure culture
- Get equipped with various methods of bacterial growth measurement
- Acquaint with different types of fermentation processes and equipment and underlying principles in downstream processing

*For more information, Contact : The Head, Dept. of Microbiology,*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC IN HORTICULTURE (COCHR) (UGC SPONSORED)

### OBJECTIVES:

- To provide students with a broad educational background, which in addition to emphasising agricultural sciences, gives an appreciation of horticulture's role in augmenting economic growth, development and improvement of society.
- To prepare people enrolled in horticultural courses to contribute to public policy formulation through their own personal development as informed citizens.
- To promote the importance of horticulture in food, medicinal and ornamental plant production, providing employment, improving the environment, creating and managing sports and recreation facilities, as one of the main leisure pursuits- gardening

### SCOPE AND RELEVANCE:

- The Horticulture has gained importance in recent years as a significant component of agriculture. Horticultural crops provide better food, higher income- improving the economic status of the farmers, all the year round occupation to the farm population engaged in production, transportation, processing and marketing operations in addition to the entrepreneurs.
- Horticultural farming promotes the development of natural resources, yields higher returns from land, enhances the land values, creates a better purchasing power among the people and as a consequence adds to the general prosperity.
- Horticultural crops play an important role in Commerce, particularly in export trade and food processing industry, besides their value in human consumption.
- Career opportunities include farm/ estate managers, plantation experts, supervisors, project co-ordinators, landscape architects and consultants, floral designers and horticultural therapists etc...
- Professional qualification, combined with an inclination towards gardening produce efficient floriculturists, landscaping professionals.
- Horticulture has also played a significant role in women empowerment, providing employment opportunities to them in mushroom cultivation, floriculture, Horticultural shows and exhibitions, bonsai, indoor and terrace gardening, rockery, dish and bottle gardening, vegetable seed production etc.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Understand the scope and importance of horticulture, branches of horticulture
- Learn the application of growth regulators in horticultural crops
- Gain knowledge about types, purpose of Training, pruning, Tillage and Mulching, Weed management
- Able to manage nursery

*For more information, Contact : The Head, Dept. of Botany*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC COURSE IN TAX MANAGEMENT (UGC SPONSORED)

### OBJECTIVES:

- To provide the knowledge to the students about Fundamentals of Accounting Income Tax and Indirect Tax.

### SCOPE AND RELEVANCE:

- After the completion of this course, students have an opportunity to get a job as an accountant or Assistant Accountant.
- The students also have an opportunity to undergo as a trainee under a Chartered Accountant.
- The Students can also become a Tax Consultant.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Understand the basic concepts and functions of accounting
- Accomplish knowledge of Taxation in India
- Identify in detail different sections of IT Act to reduce tax liability
- Understand the basic concept of GST

*For more information, Contact : The Head, Dept. of Commerce*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC IN INSURANCE MANAGEMENT (CCIMT) (UGC SPONSORED)

### OBJECTIVES:

- To provide the knowledge to the students about Risk and Insurance, Life Insurance Management, General Insurance Management, Management of Insurance Business, Insurance Marketing.

### SCOPE AND RELEVANCE:

- The students can demonstrate the knowledge of insurance contracts.
- It helps to develop the student's skill to facilitate insurance product cost and pricing, marketing & distribution.
- It also helps to examine the role of public policy including social insurance in personal financial planning and risk management.
- The students have an opportunity to become an insurance agent or consultant

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Demonstrate the knowledge of insurance contracts and provisions
- Understand the Concept of Risk and Risk Management
- Develop proficiency in Principles of Insurance
- Attain skills of Insurance Business in India

*For more information, Contact : The Head, Dept. of Commerce*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC COURSE IN SHARANA SAHITHYA (UGC SPONSORED)

### OBJECTIVES:

- To develop moral consciouness among the students.
- To overcome the difficulties of life.
- To create awareness of the duty of the citizen to the progress of the society.

### SCOPE AND RELEVANCE:

- To control the criminal activities exploitation of the modern society.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Create awareness about egalitarian society where all people enjoy equal status in terms of social & economic equality
- Understand the concepts of KAYAKA & DASOHA
- Create awareness of the duty of the citizen

*For more information, Contact : The Head, Dept. of Kannada*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

B.N.Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC COURSE IN COMPUTERIZED ACCOUNTING (UGC SPONSORED)

### OBJECTIVES:

- To provide the knowledge to the students about Fundamentals of Accounting, Office automation, Advanced Accounting, Accounting Packages (Tally), E-Commerce and Information Systems.

### SCOPE AND RELEVANCE:

- The students have a job opportunity in the companies such as pay roll clerk, data entry clerk, audit clerk, etc.
- The students are also having an opportunity to become an accounting clerk, Accounting Receptionist.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Understand the application of business Knowledge in both theoretical and practical aspects
- Understand the basic concepts and functions of accounting, trade and computer software
- Develop proficiency in the management of an organisation
- Attain skills in conducting business transactions online
- Analyse the scope of the business by adopting modern technology in the business practice

*For more information, Contact : The Head, Dept. of Commerce*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC IN WEB DESIGN (CCWEB) (UGC SPONSORED)

### OBJECTIVES:

- To increase technical & design competence of students to Develop and maintain Web Sites for small organizations.
- To train students to upgrade Web sites
- To impart necessary skills to be enterprising and self-reliant.

### SCOPE:

- After completion of the course students can choose to work in e-Commerce or IT Sectors. They are eligible to work as:
- Graphics Designers.
- Static / Dynamic web site Design & hosting.
- Web Site maintenance Engineer.

### RELEVANCE:

- The course in Web Design prepares the students for career in e-Commerce, IT sectors or any organizations / Institutions where uses / manages web sites internally. Students gain the knowledge and skills for job acquisition by studying theory in the classroom and participating in practical application through labs. There is growing demand for web designers to fulfil the requirement in
- Digital Media & e-commerce.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS:

- Acquire the knowledge and skills in the website/ application components & their working
- Acquire knowledge and skills in Image editing tools in Photoshop
- Demonstrate image, logos, and graphics designing activities
- Demonstrate website / simple front-end web application designing activities

*For more information, Contact : The Head, Dept. of Computer Science*





JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC COURSE IN TOURISM (UGC SPONSORED)

### OBJECTIVES:

- To make the students aware of the principles of Tourism from the point of view of Travel and Tourism
- To expose the students to the scope and potential available for Tourism Industry.
- To impart specific skills such as Travel and Hotel management, guide, craft and marketing strategies.
- To provide knowledge on vocational education, travel documents, passports, visa's and others.
- To empower students with skills to face tourism industry and to offer internship training.
- Conservation of cultural Heritage and protection of monuments.

### SCOPE:

- There is vast scope tourism in India.
- Tourism as one sector that shall propel growth, contributes foreign exchange, enhance employability and result in community development.
- The most important dimension of tourism is the cultural exchange among various nationalities that visits the country and cross cultural interface that shall pave way for universal peace and harmony.
- Moreover, tourism is seen as an economy option.
- The scope of travel and tourism in truly immense, in the last six years it has created 11 million jobs and has the potential to create 37 million jobs, as estimated by the NSSO, Ministry of Tourism.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS

- Establish a core knowledge base of tourism concepts and principles
- Identify the key elements and structure of tourism industries and their economic contribution on a global scale
- Identify the key socio-cultural, environmental and economic impacts of tourism and a more sustainable approach to tourism development and management
- Support local handicrafts and cultural pursuits

*For more information, Contact : The Head, Dept. of History*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC IN ANIMATION & VISUAL EFFECTS (COCAV) (UGC SPONSORED)

### OBJECTIVES:

- To train, upgrade and increase Skill & technical competence of students to draw cartoons, pictures, background designs, by free hand drawing and Computer graphics tools.
- To prepare story board, 2D Characters & 3D models creations .
- To impart necessary skills to be enterprising and self-reliant.

### SCOPE:

- After completion of the course students can choose to work in Film Production, TV Channels, and Advertisements & Print Media. They are eligible to work as:
- Animators.
- Graphic Designers.
- VFX Editors.

### RELEVANCE:

- The course in Animation & Visual Effects prepares the students for career in Film Production, TV Channels, and Advertisements & Print Media. Students gain the knowledge and skills for job acquisition by studying theory in the classroom and participating in practical application through labs.
- There is growing demand for Animators, Graphic Designers & VFX Editors to fulfil the requirement in Digital Entertainment & Advertisement Media.

### SCHEME:

- Certificate Course
- Diploma Course
- Advanced Diploma Course

### OUTCOMES OF COCS:

- Acquire the knowledge and skills in the Basics of Freehand drawing elements
- Demonstrate full-fledged Chater designing activities
- Acquire the Basic knowledge of Image Editing Concepts & Management
- Acquire the knowledge and skills of Image Layers & 3d Image editing

*For more information, Contact : The Head, Dept. of Computer Science*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC IN YOGA (CCYOG) (UGC SPONSORED)

### SCOPE:

- Career opportunities in health clubs, yoga & Pilates studios, special needs centre, private gym and in individual clients homes.
- Several job options available both in the government & private sectors.
- Self-employed by opening your own yoga center.
- Yoga also opens various jobs in the given field such as research, management, hospital, academic, administrative, consultation, etc.

### OBJECTIVES:

- To enable the student to have good health.
- To practice mental hygiene.
- To possess emotional stability.
- To integrate moral values.
- To attain higher level of consciousness

### OBJECTIVES:

- The modern day lifestyle is as such where humans struggle with physical and physiological stress in their lives. This is where yoga comes as a rescue to alleviate the physical and mental stress. Based on the holistic principles of harmony and unification within body and nature,
- Yoga's simple postures leave a powerful impact against busy lifestyle demands.
- It is not only a great solution to stay fit, but has also emerged as an alternative form of therapy

### OUTCOMES OF COCS

- Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination
- Demonstrate the ability to perform yoga movements in various combination and forms
- Demonstrate an understanding of health problems associated with inadequate fitness levels
- Demonstrate an understanding of sound nutritional practices as related to health and physical performance

*For more information, Contact : Mrs. Ramya.  
Warden, Girls Hostel, JSS College Campus, Mysuru*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR COC IN BHARATHIYA SAMSKRUTHI (COCBS) (2 SEMESTERS/1 YEAR)

### OBJECTIVES:

- To create awareness about Indian culture.
- To highlight India's art, architecture and music.
- To create awareness about scientific background of Indian tradition, beliefs and practices.
- To make the students imbibe the Indian culture 'Unity in diversity'.
- To create awareness about the Indian family system.
- .

### SCOPE AND RELEVANCE

- To learn the values of Indian culture.
- To develop respect for Indian art, architecture and music.
- To develop moral values of life.
- To live with unity and take the county in progressive path.
- To inculcate family values.

### OUTCOMES OF COCS:

- Enable students to appreciate the importance of heritage and unity in diversity of India
- Learn to historicize the concept to better understand changes in the given paradigm over time
- Study the philosophy of self-management
- Understand the development of Indian literature by different theories & textual study



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) PARASITOLOGY

### OBJECTIVES:

- Parasitology is the study of the interaction between parasites and their hosts. In general, parasitologists tend to concentrate on eukaryotic parasites, such as lice, mites, protozoa and worms, with prokaryotic parasites and other infectious agents the focus of fields such as bacteriology, microbiology and virology

### SCOPE AND RELEVANCE:

- Parasitology is the study of parasites, their hosts, and the relationship between them. As a biological discipline, the scope of parasitology is not determined by the organism or environment in question but by their way of life

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Understand the fundamental concepts of parasitism the origin and evolution of parasitic organisms.
- Analyze the structure, life cycle, mode of transmission, pathogenicity and control measures of protozoan parasites
- Evaluate the habitat, life cycle, pathogenicity, and preventive strategies for ectoparasites
- Explore the types and ecobiology of parasitoids, along with chemical cues and examine bacterial infections

*For more information, Contact : The Head, Dept. PG Zoology*



## ADMISSIONS OPEN FOR (VAC) ECOTOXICOLOGY

### OBJECTIVES:

- It aims to elucidate mechanisms and processes whereby chemicals exert their effects on ecosystems and the impact caused at the population or community level.

### SCOPE AND RELEVANCE:

- Ecotoxicology is the study of harmful effects of toxic pollutants in ecosystems.
- These pollutants include mostly man-made synthetic chemicals their by-products and/or breakdown products.
- The objective of ecotoxicology is to obtain data for risk assessment due to the presence of such pollutants in the environment

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Develop an understanding of the general principles of toxicology including the importance of dose and dose-response relationships factors influencing toxicity, and the use of bioassay-toxicity evaluation.
- Analyze the classification of pesticides, their sources, and the various toxic effects.
- Evaluate the toxicological properties and effects of heavy metals (lead, mercury) hydrocarbons (aromatic and aliphatic), cyanides, and toxic gas.
- Examine natural toxins, venoms, and poisons, their properties, effects major sites, and mechanisms of action, as well as the use of toxin and venom therapy.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) ಕನ್ನಡ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ

### OBJECTIVES:

- Kannada is also recognized as one of the classical languages of India, along with Tamil, Telugu, Sanskrit, and Malayalam.
- The language has a unique cultural significance, as it has been the medium of expression for various forms of art, literature, and folklore.

### SCOPE AND RELEVANCE:

- Translation helps us to know about the developments in the field of Creative arts, education, literature, business, science and politics.
- It has shifted from the traditional conception of the fixed, stable and unchangeable nature of the text and its meaning to a text with wide scope for variations.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- By understanding the concept of technology, the relationship between Kannada and technology will be understood.
- The possibilities of development of Kannada with technology will be known.
- To inform the use of technology to supplement study, research, thinking.

*For more information, Contact : The Head, Dept. PG BIOCHEMISTRY*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) ಕನ್ನಡ ಭಾಷಾಂತರ ಸಾಹಿತ್ಯ

### OBJECTIVES:

- Kannada is also recognized as one of the classical languages of India, along with Tamil, Telugu, Sanskrit, and Malayalam.
- The language has a unique cultural significance, as it has been the medium of expression for various forms of art, literature, and folklore.

### SCOPE AND RELEVANCE:

- Translation helps us to know about the developments in the field of Creative arts, education, literature, business, science and politics.
- It has shifted from the traditional conception of the fixed, stable and unchangeable nature of the text and its meaning to a text with wide scope for variations.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Kannada translation literature will be introduced.
- The possibilities of development of Kannada will be known through translation.
- The possibilities of translation are expanded by practical translation.

*For more information, Contact : The Head, Dept. PG Kannada*





JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) NUCLEAR DATA FOR SCIENCE & TECHNOLOGY

### OBJECTIVES:

- Its principal objective is “to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world”. Nuclear power objectives achieving the nuclear energy basic principles

### SCOPE AND RELEVANCE:

- This includes nuclear power, nuclear weapons, nuclear medicine and magnetic resonance imaging, industrial and agricultural isotopes, ion implantation in materials engineering, and radiocarbon dating in geology and archaeology.
- Such applications are studied in the field of nuclear engineering.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Scientists use nuclear data for applications including basic nuclear science, nuclear non- proliferation, space exploration, nuclear energy production (from both fission and fusion), and medicine

*For more information, Contact : The Head, Dept. PG Physics*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) ASTROPHYSICS AND COSMOLOGY

### OBJECTIVES:

- Astrophysics and Cosmology aims at providing students with a comprehensive, up-to-date view of the main fields of modern astrophysics, including astronomical detectors and techniques, black holes and neutron stars, cosmology, gravitational physics, planets, stars and galaxies.

### SCOPE AND RELEVANCE:

- Astrophysicists use the principles of physics to study the solar system, stars, galaxies, and the universe.
- Jobs in the astrophysics field can range from research to engineering and education. Understanding what roles are available in this field can help you find a job that suits your unique interests and skill.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Astrophysics drives the development of advanced technologies that benefit various fields. Telescopes, satellites, detectors, and data analysis techniques developed for astrophysics often find applications in medicine, telecommunications, and other fields.

*For more information, Contact : The Head, Dept. PG Physics*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) INTRODUCTION TO MATLAB

### OBJECTIVES:

- Matlab Is a programming platform designed specifically for engineers and scientists to analyze and design systems and products that transform our world.
- The heart of MATLAB is the MATLAB language, a matrix-based language allowing the most natural expression of computational mathematics.

### SCOPE AND RELEVANCE:

- Matlab is a high-level programming language and interactive environment primarily used for numerical computing, data analysis, and algorithm development. It's important in the IT industry for tasks like data analysis, modelling , and simulation.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Undertake arithmetic on scalars, vectors and matrices.
- Create 2D and 3D plots of mathematical functions and data.
- Carry out Monte-Carlo simulations.
- Solve a number of signal processing problems.

*For more information, Contact : The Head, Dept. PG Computer Science*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) Introduction to Python Programming

### OBJECTIVES:

- Python is a computer programming language often used to build websites and software, automate tasks, and analyze data.
- Python is a general-purpose language, used to create various programmes.

### SCOPE AND RELEVANCE:

- Python is one of the top programming languages as per the TIOBE and PYPL. It opens the door to multiple career opportunities, including web and app development, data engineering, full stack development, DevOps engineering, game development, IoT development, data science, product management.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Create your first program in Python IDLE.
- Implement OOPs concepts in your programming.
- Use Arrays, and Data structures.
- Create an application with the support of graphics in Python.
- Implement error handling.

JSS Mahavidyapeetha  
**JSS College of Arts, Commerce and Science**  
Ooty Road, Mysuru

**PG Department of Computer Science**

**Value Added Course in**  
**Database Management System**

**Course Code:CSC060**

**Course Outcomes:**

At the end of the course students will be able to:

- CO1. Explain the features of database management systems and Relational database.
- CO2. Design conceptual models of a database using ER modelling for real life applications and also construct queries in Relational Algebra.
- CO3. Create and populate a RDBMS for a real life application, with constraints and keys, using SQL.
- CO4. Retrieve any type of information from a data base by formulating complex queries in SQL.
- CO5. Analyze the existing design of a database schema and apply concepts of normalization to design an optimal database.
- CO6. Build indexing mechanisms for efficient retrieval of information from a database

**Duration: 30 h**

**Contact: Head of PG Dept. of Computer Science**



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) MUSHROOM CULTURE TECHNOLOGY

### OBJECTIVES:

- To provide basic knowledge in cultivation of mushrooms. Able to grow mushrooms in a natural way. Sustainable use of resources

### SCOPE AND RELEVANCE:

- The use of automated systems allows for greater control over the environment in which mushrooms are grown. These systems can control variables such as temperature, humidity, and carbon dioxide levels, ensuring optimal growing conditions for mushrooms.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Students can start small scale industry of Mushroom cultivation. Students study the morphology and types of Mushrooms. They are aware of the identification of edible and poisonous Mushrooms. Students will be able produce spawn on their own.

*For more information, Contact : The Head, Dept. PG BOTANY*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) BIO FERTILIZERS

### OBJECTIVES:

- Biofertilizers improve the soil texture and yield of plants.
- They do not allow pathogens to flourish. They are eco-friendly and cost-effective.
- Biofertilizers protect the environment from pollutants since they are natural fertilizers.

### SCOPE AND RELEVANCE:

- Biofertilizers are living microorganisms that help supply nutrients to plants.
- They can fix atmospheric nitrogen, solubilize phosphorus, and stimulate plant growth. Common types include Rhizobium for legumes.
- Azotobacter for rice and vegetables, and mycorrhizal.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- There are economic and environmental concerns arising from the use of artificial fertilisers.
- These include price volatility and long-term impacts on soil health air quality, water quality and biodiversity.

*For more information, Contact : The Head, Dept. PG BOTANY*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) ORGANIC FARMING

### OBJECTIVES:

- The aims for organic farming are: Conserving environment and natural resources re-establishing ecological balance, encouraging sustainable agriculture, improving soil fertility, conserving flora and fauna, increasing genetic diversity, and putting an end to chemical pollution and toxic residues..

### SCOPE AND RELEVANCE:

- Organic farming which is a holistic production management system that promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity is hence important. Many studies have shown that organic farming methods can produce even higher yields than conventional methods.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- It reduces human and animal health hazards by reducing the level of residues in the product. It helps in keeping agricultural production at a sustainable level.
- It reduces the cost of agricultural production and also improves the soil health.

*For more information, Contact : The Head, Dept. PG BOTANY*





JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) FUNDAMENTALS OF DIGITAL MARKETING

### OBJECTIVES:

- The course provides the coverage on the strategies and technologies required to effectively grow a business through digital marketing.
- The goal of digital marketing is to create a digital campaign that will advertise a company on the web and social media platforms.

### SCOPE AND RELEVANCE:

- Digital marketing lets you communicate with your customers in real-time. More importantly, it lets them communicate with you. Think about your social media strategy. It's great when your target audience sees your latest post,

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Acquaint concepts of marketing and the role of marketing in society
- knowledge on applications of digital marketing in the globalized market
- Understand the concept of Digital Marketing Mix.
- Learn about Application and usage of E-mail advertisement and mobile marketing

*For more information, Contact : The Head, Dept. PG Commerce*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) Life Skills

### OBJECTIVES:

- The Course provides the coverage on Communication and its important role in Shaping an individual's life.
- Personal as well as professional, also it is the backbone of any organization/intuition. Success in life

### SCOPE AND RELEVANCE:

- After the completion of this course, the Students will be able to Techniques of effective listening -Listening and comprehension Probing questions-Barriers to listening students have an opportunity to get a job in various fields like Effective use of Social Media- social media websites -Advantages of social Media.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Acquaint about Non-verbal messages are communication to others
- Analyze common communication problems that may be holding learners back
- Understand communication beyond language.
- Knowledge about Social Media
- Acquaint about non-verbal messages are communicating to others

*For more information, Contact : The Head, Dept. PG Commerce*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) MICROBIAL BIOCHEMISTRY

### OBJECTIVES:

- Microbial Biochemistry is the branch of medical Science which explains about the chemical processes that takes place in microorganisms like bacteria, virus fungi and some algae.

### SCOPE AND RELEVANCE:

- Biochemistry has applications in medicine, nutrition, agriculture, and other fields.
- It seeks to understand living systems at the molecular level and provide insights into disease diagnosis and treatment. This document provides an overview of the field of microbiology.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Specify in details with examples staining techniques used for the identification of microbes
- Write down in depth Molecular biology of prokaryotes
- Learn in details with application, if applicable, Operon systems in gene regulation of bacteria

*For more information, Contact : The Head, Dept. PG Biochemistry*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) CLINICAL RESEARCH METHODS AND INDUSTRIAL BIOCHEMISTRY

### OBJECTIVES:

- Clinical Biochemistry aims to initiate the student in understanding the study of the biological properties in vitro that contribute to the prevention, diagnosis, prognosis and monitoring of diseases and disease states in humans

### SCOPE AND RELEVANCE:

- Industrial biochemistry has evolved from ancient fermentation processes to a sophisticated discipline that underpins modern industrial processes.
- Its applications span a wide range of sectors, from food and pharmaceuticals to energy and the environment.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Specify the classification and characteristics of clinical practice and clinical research
- Learn in details with application, if applicable, clinical Research methods
- Identify in depth fermentation technology and downstream Processing

*For more information, Contact : The Head, Dept. PG Biochemistry*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) BIOFERTILIZER PRODUCTION TECHNOLOGY

### OBJECTIVES:

- The main aim of the unit is to promote the use of Bio fertilizer technology
- The addition of nutrients through the natural process of nitrogen fixation solubilising phosphorus, as well as the stimulation of plant growth by synthesising growth-promoting substances.

### SCOPE AND RELEVANCE:

- Bio fertilizers contain living microorganisms that colonize plant roots or soil and promote plant growth through natural processes like nitrogen fixation and phosphorus solubilisation.
- They improve soil fertility and plant nutrient levels without chemicals, making agriculture more sustainable.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- To facilitate to understand basics of biofertilizers
- To promote organic farming
- Creation of skilled human resources and providing employment.

*For more information, Contact : The Head, Dept. PG Biofertilizer Production Technology*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) PATHOPHYSIOLOGY OF COMMON DISEASES

### OBJECTIVES:

- This course will apply knowledge of normal anatomy and physiology to promote a clear understanding of disease processes.
- It introduces the student to the common body responses and manifestations of disease that result from imbalances in homeostasis of the body.

### SCOPE AND RELEVANCE:

- Pathophysiology provides essential insights into the mechanisms underlying various diseases. By studying the functional changes occurring within the body during illness or injury, healthcare professionals can improve diagnosis, treatment and prevention strategies.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Demonstrate a basic understanding of the concepts and elements of disease.
- Demonstrate an understanding of the mechanisms of diseases, the diagnosis of diseases, and the treatment of diseases.
- Understand the pharmacological treatment of diseases or conditions.

*For more information, Contact : The Head, Dept. PG BIO-TECHNOLOGY*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) LABORATORY SAFETY & BASIC COMPUTER SKILLS FOR CHEMISTS

### OBJECTIVES:

- Practice safety rules while performing experiments in the lab.
- Develop good laboratory practices.
- Confidently handle various chemicals used in a general chemistry lab.

### SCOPE AND RELEVANCE:

- Teaching students about basic laboratory safety
- Teaching students about first aid in minor lab accidents
- Familiarize the students with chemdraw, power point presentation and excel sheet.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Perform first-aid treatment in case of common injuries/accidents in the lab.
- Apply IT tools to process the raw experimental data and make conclusions.
- Write a project report and also give a presentation on it.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) BASIC TOOLS AND OPERATIONS OF ANALYTICAL CHEMISTRY

### OBJECTIVES:

- Use reagent-grade chemicals.
- How to use the analytical balance, Volumetric glassware and how to use it, how to calibrate glassware.
- How to prepare standard acid and base solutions.
- Common laboratory apparatus for handling and treating samples.

### SCOPE AND RELEVANCE:

- Often the same instrument can separate, identify and quantify an analyte.
- Analytical chemistry is also focused on improvements in experimental design, chemometrics, and the creation of new measurement tools.
- Analytical chemistry has broad applications to medicine, science, and engineering.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- To enhance the knowledge on usage of analytical terminologies.
- To build the skills on stoichiometric solutions.
- To acquire the skills on reagents preparations.





JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) INDUSTRY & RESEARCH ASPECTS

### OBJECTIVES:

- To impart job-oriented skills through hands-on experiment on water quality assessment and spectrophotometric detection of various water contaminant.

### SCOPE AND RELEVANCE:

- Teaching students about Water Quality Analysis
- Teaching students about Spectral studies
- Familiarize the students with chemdraw and ChemSketch.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Analyze the ground and industrial waste water.
- Able to determine the common water contaminant using spectrophotometric technique.
- Use Mathematical and Matlab software's to perform algebraic and numerical calculation and visualize mathematical functions by plotting graphs relevant to the topics of physical chemistry like chemical kinetics, thermodynamics, quantum chemistry etc.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) SUSTAINABLE DEVELOPMENT

### OBJECTIVES:

- To impart job-oriented skills through hands-on experiment on chemical Modern energy storage and conversion systems for sustainable development. sensing of pollutant,

### SCOPE AND RELEVANCE:

- Teaching students about Environmental Pollutant.
- Teaching students about Energy Storage.
- Familiarize the students with LATEX and Jab Ref.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Design chemical sensor.
- Make sensor kit.
- Explain the fundamental concepts of batteries and super capacitors.
- Design the optimized hybrid device based on the targeted application.
- Write scientific documents using the type setting platform LATEX.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) STATISTICAL PACKAGE FOR SOCIAL SCIENCES

### OBJECTIVES:

- SPSS allows users to easily obtain statistical results without programming by providing pre-programmed procedures for statistical analyses such as descriptive statistics, bivariate and multivariate analyses, predictive analytics, and graphics

### SCOPE AND RELEVANCE:

- SPSS is extensively used in academic research for analyzing survey data, conducting experiments, and testing hypotheses. Learning SPSS can be advantageous for students and researchers looking to publish their findings in academic journals.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Students' familiarity with the tool box of statistical software
- Capacitating students in analysing complex information with the help of statistical software –Statistical Package for Social Sciences (SPSS).
- A strong theoretical and empirical foundation in statistical analysis.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) APPLIED TRANSACTIONAL ANALYSIS

### OBJECTIVES:

- Transactional Analysis aims to help individuals realize what is shaping their communication and interactions.
- Helping them become self aware creates a change and allows them to speak from their adult ego, instead of the parent or child ego.

### SCOPE AND RELEVANCE:

- Transactional Analysis has wide applications in clinical, therapeutic organizational and personal development, encompassing communications management, personality, relationships and behaviour.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Recognize personal obstacles & how they impede their own personal success. More importantly, how to transcend these obstacles
- Discover how early life decisions obstruct & sabotage your success potential. More importantly, how can you change the course of your life
- Discover the finer nuances of interpersonal relationship politics in the office, home & social circle. How can one engage in pattern recognition to affect both teamwork & personal effectiveness
- The Art of Constructive Feedback & Engineering Interactions to reach a win-win outcome, to enhance relationships and solve relationship problems

*For more information, Contact : The Head, Dept. PG Master Social Work*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) SOFT SKILLS

### OBJECTIVES:

- The ability to encourage learners to achieve learning goals by developing their knowledge, competencies and talents. needs.is able to train learners' thinking, to improve their perseverance and patience. is able to enrich learners by fostering the building of self-esteem and self-confidence

### SCOPE AND RELEVANCE:

- Soft skills can also be thought of as people skills.
- These can include good communication and interpersonal skills, leadership problem solving, work ethic, time management, and teamwork.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Develop soft skills
- Cultivate critical thinking and problem-solving abilities
- Nurture leadership and organizational skills through interactive group tasks
- Learn to collaborate within diverse teams
- CO5: acquire ability to function proficiently in varied professional settings



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) CONSERVATION BIOLOGY

### OBJECTIVES:

- To document Earth's biological diversity,
- To investigate how humans influence species, evolution, and ecosystem processes
- To investigate approaches to protect and restore biological communities, maintain genetic diversity, and prevent the extinction of species.

### SCOPE AND RELEVANCE:

- Conservation biology as a discipline aims to provide answers to specific questions that can be applied to management decisions.
- The main goal is to establish workable methods for preserving species and their biological communities.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Gain knowledge of biodiversity components and species concepts and biodiversity hotspots.
- Understand the status of animal diversity, extinction rates, threats and conservation tools
- Explore animal laws and policies in India, including the Wildlife Protection Act and learn about the economics of biodiversity conservation
- Develop skills in conservation education and awareness and understanding the roles of NGOs and government organizations.

*For more information, Contact : The Head, Dept. PG Biology*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) Introduction to Data Analysis Using Excel

### OBJECTIVES:

- It helps organizations harness the power of data,
- Enabling them to make decisions, optimize processes, and gain a competitive edge.
- By turning raw data into meaningful insights, data analysis empowers businesses to identify opportunities,
- Mitigate risks, and enhance their overall performance

### SCOPE AND RELEVANCE:

- Companies are effectively looking for people who can extract valuable experiences from information and drive vital decision-making. Capability in MS Excel is an important ability set in different job roles. For instance, data analysts, business analysts, financial analysts, and marketing analysts.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Indicate the names and functions of the Excel interface components.
- Enter and edit data.
- Format data and cells.
- Construct formulas, including the use of built-in functions, and relative and absolute references.
- Create and modify charts.
- Preview and print worksheets.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR

(VAC) ಕನ್ನಡ ದಾಖಲೆ ಸಾಹಿತ್ಯ

### OBJECTIVES:

- Kannada is also recognized as one of the classical languages of India, along with Tamil, Telugu, Sanskrit, and Malayalam.
- The language has a unique cultural significance, as it has been the medium of expression for various forms of art, literature, and folklore.

### SCOPE AND RELEVANCE:

- Translation helps us to know about the developments in the field of Creative arts, education, literature, business, science and politics.
- It has shifted from the traditional conception of the fixed, stable and unchangeable nature of the text and its meaning to a text with wide scope for variations.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- The meaning and importance of Kannada literature will be known.
- Kannada culture along with Kannada literature will be known.
- One can understand the method of using Kannada literature for historical study.

*For more information, Contact : The Head, Dept. PG Kannada*





JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) PLASMA PHYSICS AND TECHNOLOGY

### OBJECTIVES:

- It is designed to investigate outstanding issues in the space plasma environment such as energetic particle acceleration, transport, and interaction with electromagnetic waves, as well as magnetic reconnection processes in magnetospheric plasmas.

### SCOPE AND RELEVANCE:

- One of the great challenges of humankind is to create these high temperatures in a controlled manner and to harness the energy of nuclear fusion.
- This is the great practical goal of plasma physics-to produce nuclear fusion on the Earth.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- The study of plasma is enabling prediction of space weather, medical treatments, and even water purification



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) PRINCIPLES OF AUDITING AND PRACTICES

### OBJECTIVES:

- The basic principles of auditing are confidentiality, integrity, objectivity, independence skills and competence, work performed by others, documentation, planning audit evidence, accounting system and internal control, and audit reporting.

### SCOPE AND RELEVANCE:

- This standard addresses the auditor's duty to form an opinion on the financial statements and details the form and content of the auditor's report following an audit.
- Objectives: Form an opinion on the financial statements based on an evaluation of conclusions drawn from obtained audit evidence

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Understand the concepts of Auditing
- Acquaint internal check system and audit procedure
- Understand vouching and verification of assets and liabilities
- Analyze the Role of auditors and auditor's report



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) PHARMACEUTICAL BIOCHEMISTRY

### OBJECTIVES:

- The aim of this pharmaceutical biotechnology is to design, produce drugs that are adapted to each person's genetic make up, which can give the maximum therapeutic effect.

### SCOPE AND RELEVANCE:

- Biochemist graduates in pharmacy are engaged with the innovative work of new therapeutics just to guarantee their assembling quality control.
- The interest for pharma graduates is high in areas like - medical care, research, fabricating, clinical promoting, pharmacovigilance and so on.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Identify the details of ADME mechanism of drugs
- Learn in details with application, if applicable, Drug receptor interactions
- Deliberate in details with application, if applicable, Mode of action of anti cancer drugs



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) BIO-FUELS

### OBJECTIVES:

- It is viewed by many as a tool to help reduce greenhouse gas emissions and fossil fuel use.
- To foster rural development, and to create new markets for agricultural products.

### SCOPE AND RELEVANCE:

- Biofuels are at the centre of intensive discussion. It is viewed by many as a tool to help reduce greenhouse gas emissions and fossil fuel use, to foster rural development, and to create new markets for agricultural products.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Describe the functional principle of biofuel technologies in small and large scale.
- Describe the main steps and components in bioethanol, biodiesel and biogas production.
- Participate actively in teamwork and work with case related problem solving.

*For more information, Contact : The Head, Dept. PG BIO-TECHNOLOGY*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) Food Safety and Adulteration

### OBJECTIVES:

- The FSO concept recognizes that the ultimate objective of a food safety system is to prevent illnesses by focusing food-manufacturing attention and activities on preventing or minimizing exposure of the consumer to pathogens.

### SCOPE AND RELEVANCE:

- Food safety refers to routines in the preparation, handling and storage of food meant to prevent food borne illness and injury. From farm to factory to fork, food products may encounter any number of health hazards during their journey through the supply chain.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Proficiency in Identifying and Mitigating Food Safety Risks: Course objective is to make students adeptly identify food safety hazards, spanning microbiological, chemical, and physical contaminants.
- Competence in Detecting and Preventing Food Adulteration: Upon completion of the course, students will be able to identify common types of food adulterants and adulteration techniques, and employ appropriate methods for detecting adulterated food products.
- Mastery of Food Safety Regulations and Compliance Standards: By the end of the course, students will have a comprehensive understanding of food safety regulations and compliance standards at the local, national, and international levels.

*For more information, Contact : The Head, Dept. PG M.Voc.*

JSS Mahavidyapeetha



**JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE**  
OOTY ROAD, MYSURU – 570 025

**POSTGRADUATE DEPARTMENT OF CHEMISTRY**



**SYLLABUS**  
**A VALUE-ADDED COURSE**

**2018-19**

**FIRST SEMESTER**

**COURSE: LABORATORY SAFETY & BASIC COMPUTER SKILLS FOR CHEMISTS**

**[30 HOURS]**

**Objectives**

- Practice safety rules while performing experiments in the lab.
- Develop good laboratory practices.
- Confidently handle various chemicals used in a general chemistry lab.

**Course Outcome**

- Perform first-aid treatment in case of common injuries/accidents in the lab.
- Apply IT tools to process the raw experimental data and make conclusions.
- Write a project report and also give a presentation on it.

**Pedagogy**

- Teaching students about basic laboratory safety
- Teaching students about first aid in minor lab accidents
- Familiarize the students with chemdraw, power point presentation and excel sheet.

**Contact: Head of PG Dept. of Chemistry**

JSS Mahavidyapeetha



**JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE**  
OOTY ROAD, MYSURU – 570 025

**POSTGRADUATE DEPARTMENT OF CHEMISTRY**



**SYLLABUS**  
**A VALUE-ADDED COURSE**

**2018-19**

**COURSE: SUSTAINABLE DEVELOPMENT [30 HOURS]**

**Course Objectives**

- To impart job-oriented skills through hands-on experiment on chemical sensing of pollutant, Modern energy storage and conversion systems for sustainable development.

**Course Outcome**

After the completion of the course, the students should be able to

1. Design chemical sensor.
2. Make sensor kit.
3. Explain the fundamental concepts of batteries and super capacitors.
4. Design the optimized hybrid device based on the targeted application.
5. Write scientific documents using the type setting platform LATEX.

**Pedagogy**

- Teaching students about Environmental Pollutant.
- Teaching students about Energy Storage.
- Familiarize the students with LATEX and Jab Ref.

**Contact: PG Dept. of Chemistry**



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) TEAM SKILLS IN SOCIAL WORK

### OBJECTIVES:

- Understand the significance of team skills and know how to acquire them.
- Design, develop, and adapt to situations as individuals and as team members.

### SCOPE AND RELEVANCE:

- Social Work is all about understanding and striving to improve the lives of people in society.
- Social Workers listen to people's needs, from young children to people struggling with addictions, and help them to cope and improve their quality of life.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Use common technology messaging tools that are used in enterprises for the flow of information and transition from command and control to informal communication during an online and/or offline team session.
- Actively use and operate online team communication tools such as: Webinar, Skype, Zoom, Google hangout.
- Appreciate and demonstrate team skills.





## ADMISSIONS OPEN FOR (VAC) COMPETENCY DEVELOPMENT

### OBJECTIVES:

- **Understanding Competencies:** Provide participants with a clear understanding of competencies and their importance in personal and professional development.
- **Identification of Key Competencies:** Help participants identify and assess the key competencies relevant to their roles, industries, and career aspirations.
- **Skill Gap Analysis:** Enable participants to conduct a thorough analysis of their existing skills and competencies and identify areas for improvement or development.
- **Goal Setting:** Assist participants in setting clear and achievable competency development goals aligned with their personal and professional objectives.

### SCOPE AND RELEVANCE:

- A strategic and well-developed competency development plan enhances your workforce skills, reduces frustration in employees, and strengthens the team for higher performance. It is the most effective way of providing proper learning and training for a highly responsive workforce and sustainable profitability.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- **Enhanced Self-Awareness:** Participants will have a better understanding of their strengths, weaknesses, and areas for development, leading to improved self-awareness.
- **Identification of Development Needs:** Participants will identify specific competency areas requiring development and prioritise them based on their personal and professional goals.
- **Clear Development Goals:** Participants will set clear and measurable competency development goals, aligned with their aspirations and organisational requirements.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) HACCP IMPLEMENTATION IN FOOD INDUSTRY

### OBJECTIVES:

- Overview of Food Safety - Importance, global challenges, key concepts Principles of HACCP - History, significance, basic principles
- Food Safety Hazards - Biological, chemical, physical hazards, allergen management Legislation and Standards - International standards (ISO 22000, Codex Alimentarius) national regulations
- HACCP Models and Frameworks - Comparison and benefits of different models.

### SCOPE AND RELEVANCE:

- helps organisations to thoroughly analyse potential risks associated with food safety and put the necessary controls in place to tackle them.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- HACCP is a systematic approach to food safety management, aiming to identify evaluate, and control hazards throughout the food production process. In recent years, HACCP implementation has become paramount due to increasing consumer demands for safe and high-quality food products.

*For more information, Contact : The Head, Dept. PG FP&E*

JSS Mahavidyapeetha

# JSS College of Arts, Commerce and Science

Ooty Road, Mysuru

## DDUKK: FOOD PROCESSING & ENGINEERING

Value Added Course in

### Problem Solving Tools in Food Industries

2018-19

Contact Hours: 30

Department	Food Processing and Engineering
Programme / Semester	M.Voc / III Semester
Course	Value Added Course
Course Title	Problem Solving Tools in Food Industries
Course Code	MVC030
Scheme	LTP: 2:0:0 30 Hours Lecture
Exam Pattern	C1:10, C2:10, C3 :30

#### Learning Outcomes

- Problem Solving - Importance in food industry
- Root Cause Analysis (RCA) – Techniques
- Plan-Do-Check-Act (PDCA) Cycle
- Key Performance Indicators (KPIs)

Contact: DDUKK, Food Processing & Engg. Dept.



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) BASICS OF CREATIVE WRITING

### OBJECTIVES:

- The eight elements of creative writing that are used in short stories and novels are character development, setting, plot, conflict, theme, point of view, tone, and style. Some of these elements are also often used in poems and works of creative nonfiction such as memoir and personal essay

### SCOPE AND RELEVANCE:

- Creative writing is any writing that goes outside the bounds of normal professional
- Journalistic, academic, or technical forms of literature, typically identified by an emphasis on narrative craft, character development, and the use of literary tropes or with various traditions of poetry and poetics.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Learn the key aspects of creative writing
- Develop a stronger ability to refine one's own writing
- Acquire skills of critique writing skills
- Formulate critical reading and thinking skills
- Gain the knowledge of finding inspiration in the works that have been read

*For more information, Contact : The Head, Dept. PG English*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) English for Business Communication

### OBJECTIVES:

- The goal of any Business English is to allow students to effectively communicate with others in business scenarios, whether that communication is in correspondence.

### SCOPE AND RELEVANCE:

- Business communication plays a significant role in any company, and it should always be one of the key fundamental elements of success.
- Excellent communication skills within a business environment vastly contribute to personal growth,
- Increased quality of performance at work, and overall job satisfaction.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- A comprehensive idea about business correspondence
- The ability to prepare business letters, business reports, technical proposal
- The tips to improve their speaking skills
- A thorough knowledge in the field of proof reading and editing

*For more information, Contact : The Head, Dept. PG. English*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) Food Safety Management System Implementation in Food Chain

### OBJECTIVES:

- The core purpose of a Food Safety Management System is to provide robust consumer protection from food borne illnesses.
- Achieving this goal involves identification, monitoring, and effective control of potential hazards at every stage of the food production process and throughout the supply chain

### SCOPE AND RELEVANCE:

- It should identify potential hazards in all aspects of food handling, describe how such hazards can be controlled/monitored, and define appropriate corrective action to be taken when a hazard is found to be under-managed. A food safety program must also include the requirements for appropriate record keeping

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Food Safety Management System (FSMS) is a program that aims to prevent food safety hazards from causing adverse health effects on consumers.
- Food safety management systems also help food business operators comply with international standards and regulations, such as ISO 22000

*For more information, Contact : The Head, Dept. PG M.Voc.*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) BIOTECHNOLOGY SKILL ENHANCEMENT PROGRAM (BiSEP)

### OBJECTIVES:

- These objectives include Providing market-relevant skills training, Ensuring they are equipped for success in their chosen fields.
- Creating ample opportunities for talent development among Indian youth, thereby fostering growth and innovation across various sectors.

### SCOPE AND RELEVANCE:

- The objective of skill development programme is to provide high-quality hands-on training of tools and techniques.
- To biotechnology students in multidisciplinary areas of Biotechnology to make the young biotechnologist ready to take-up jobs in industries, hospitals, medical colleges R&D laboratories, diagnostic

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Students learn Good manufacturing practices
- Students have been given training in laboratory skills and knowledge about biotech industry.
- Cognitive Knowledge To provide education that leads to comprehensive understanding of the principles and practices of biotechnology.

*For more information, Contact : The Head, Dept.PG BIOTECHNOLOGY*



JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) MATHEMATICS FOR COMPETITIVE EXAM

### OBJECTIVES:

- The main purpose of adding the category of Quantitative Aptitude to a competitive exam is to test your ability to solve basic mathematical problems logically.

### SCOPE AND RELEVANCE:

- Mathematics is an important subject that helps develop logical thinking and problem solving skills.
- It is the science of numbers, quantity, and space. Mathematics involves discovering relationships and expressing them symbolically through words, numbers, letters, diagrams, and graphs.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Learn about HCF, LCM, average, surds and others.
- Understand in depth the concept of Surds and Indices, percentage.
- Solve problems on Profit, Loss, Simple, compound interest etc
- Analyze permutation and combination, probability and many concepts in graphs.

*For more information, Contact : The Head, Dept. PG Mathematics*





JSS MAHAVIDYAPEETHA

# JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(Autonomous, NAAC 'A' Grade, College with Potential for Excellence)

Ooty Road, Mysuru-570 025 ,Karnataka

## ADMISSIONS OPEN FOR (VAC) STATISTICS

### OBJECTIVES:

- The main purpose of using statistics is to plan the collected data in terms of experimental designs and statistical surveys.
- Statistics is considered a mathematical science that works with numerical data.
- In short, statistics is a crucial process which helps to make the decision based on the data.

### SCOPE AND RELEVANCE:

- Statistics is an important field because it helps us understand the general trends and patterns in a given data set.
- Statistics can be used for analysing data and drawing conclusions from it.
- It can also be used for making predictions about future events and behaviours.

### SCHEME:

- Value Added Course

### OUTCOMES OF VACs

- Understand the have the basic knowledge on data collection and various statistical elementary tools.
- Deliberate in details with application, if applicable, Presentation of special reference.
- Write down the details of Measures of Central Tendency and Dispersion.
- Understand the characteristics of Bivariate data and identify the details of therank correlation.