## **TUMKUR UNIVERSITY**

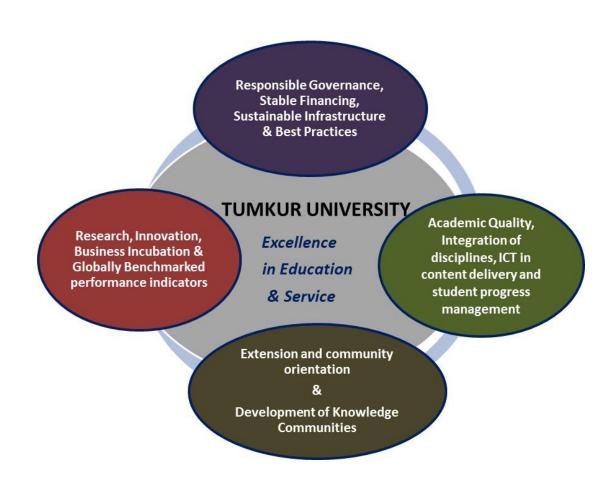


# Perspective/Strategic Plan and Deployment documents

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# TUMKUR UNIVERSITY

VISION FOR EXCELLENCE IN ACADEMICS & SERVICE



### **Strategic Road Map for Achieving the Vision**

"The challenges and opportunities of Tumkur University's changing environment demand a need for enhanced institutional capacity to act as a unit, that is, to chart strategic directions and mobilize colleges and schools around those directions. The strategic plan puts forth an overarching aspiration for the university: to be widely recognized as a model university for education, fundamental knowledge creation with skills development programmes, and addressing the needs of society at large."

#### **Objectives**

- The University shall strive to achieve excellence in higher education by offering need-based and value-based academic programmes of studies which are interdisciplinary in their approach
- 2. The University will have a global outlook and international orientation to its programmes and services, and will adopt a holistic approach to higher education by taking into account opportunities for peer-group learning, self-learning, work experience, individual initiatives and group work by harnessing the latent talents of students
- 3. The University will strive to match up with global benchmarks with respect to educational facilities, physical infrastructure and research environment
- 4. The University will be committed to ensuring working conditions, work ethics, work culture and services that promote welfare of all stakeholders the students, the faculty, staff and society at large
- 5. The University will aim at attracting the best and most eminent faculty through a multi-mode recruitment policy - full time, adjunct, chair professorship, scholar-inresidence, part-time, visiting and guest faculty
- 6. Adopt pedagogic methods which recognize that each individual learner is unique in his/her abilities, talent, dedication, commitment, devotion and approach to life and that each one will have to be provided opportunity to learn at his/her own pace and unique way.
- 7. The University will organise its academic activities such as to create conditions for focused attention to the development of specific disciplines and advancement of knowledge through cross-fertilization of ideas and by bringing together a cross section of disciplines.

- 8. The University will have Departments and Research Centres representing all domains of higher learning thereby offering a wide variety of academic programmes at all levels of higher education and across academic and professional disciplines in a modular curricular framework and multi-disciplinary mode, benchmarked with the best global practices.
- 9. To make special provisions for integrated courses in humanities, social sciences, sciences and technology in its educational programmes
- 10. To take appropriate measures for promoting innovations in teaching-learning process and inter-disciplinary studies and research
- 11. To educate and train manpower for the development of the country
- 12. To establish linkages with industries for the promotion of science and technology
- 13. To pay special attention to the improvement of social and economic conditions and welfare of the people, their intellectual, academic and cultural development
- 14. Innovative Courses and programme of studies shall be introduced with provision for periodic review and restructuring.

#### **Action Plan**

In order to fulfill, in letter and intent, the promise made to the nation in setting up this university, we intend to undertake, on priority basis and in a time bound manner, the following:

- Designing of academic architecture, curricular framework, schools, departments and centres of studies, programme of studies, admission policy, examination system, fee policy, such as to make a world class university, promoting innovation and excellence;
- strategic policies for attracting, nurturing and retaining quality faculty and professionals required for translating into action the vision, mission and objectives of the university;

- devising strategies and plans for accessing adequate funding with assured flow of resources for unhindered and fast-tracked development of the required infrastructure and autonomous functioning of the academic and administrative activities of the university;
- 4. networking and collaborating with institutions of global repute in the areas of curriculum development, student and faculty exchange, collaborative research, knowledge sharing and knowledge development;

The general strategy proposed here for achieving this aspiration is captured by two words: focus and connectivity. (1) Focus on strong or potentially strong academic programs that are strategically important to the university and maintaining areas of excellence within each of the basic academic groupings—humanities and the arts; life sciences and agricultural sciences; physical sciences and engineering; social sciences; and professional schools. In other words, creating and maintaining academic leadership across all of the broad areas (2) Build greater connectivity among the diverse colleges, schools, and programs around these basic academic areas by developing new integrations, boundary-crossing structures, and productive synergies. Greater connectivity implies that it will be easy for students and faculty to cross college and program boundaries in pursuit of their academic goals.

#### This will be achieved by:

- 1. Sustaining excellence in teaching, research, and public engagement
- 2. Treating all individuals with dignity, respect, and fairness
- 3. Embracing difference and diversity
- 4. Being collaborative, collegial, and caring towards the fraternity and student body as also the larger community
- Making University education accessible and affordable to all who meet high academic standards

- 6. Maintaining and selectively strengthening in cost-effective ways the core infrastructures for research, scholarship, and creativity, including in particular libraries and shared research facilities
- 7. Encouraging productive, mutually beneficial collaborations between faculty
- 8. Developing better data, criteria, and procedures for evaluating and tracking the quality of research, scholarship, and creativity of faculty, departments, and colleges
- 9. Encouraging departments to develop strategic plans for enhancing or achieving academic distinction and leadership
- 10. Selectively maintaining and promoting core shared facilities in the sciences and social sciences, taking account of the research needs of local, national, and international scientific communities, external funding opportunities, and cost efficiency.
- 11. Clearly defining the roles and responsibilities for effective and efficient governance in a decentralized academic environment
- 12. Implementing cost-effective investments in support systems and infrastructure that meet mission-based needs
- 13. Recognizing, anticipating, and managing the different types of institutional risk (e.g., operational, compliance, reputational) and promote a university-wide sense of responsibility for the management of such risks
- 14. Aligning support operations with the core academic mission and university strategic plan by maintaining clear priorities, metrics for assessing them, and appropriate internal controls
- 15. Develop and improve the skills of unit leaders to promote and manage change, especially given the need for continuous improvements in administrative and academic functions
- 16. Support and, where feasible, strengthen data-informed, collaborative, and transparent decision making
- 17. Effectively coordinate the delivery of IT services and infrastructure that support academic and research missions as well as business needs of the university in a financially responsible way

18. Ensure that information technology services and infrastructure support the access, security, and privacy needs for information stored within the infrastructure

#### The University as a part of its strategy wishes to adopt the following strategy:

#### 1. Achieving Educational Excellence

- Create and sustain a culture that supports teaching excellence in all academic units
- Strengthen institutional structures that promote pedagogical innovations both centrally and within colleges and programs
- Provide a more unified and shared educational experience for Tumkur University undergraduates
- Strengthen the educational impact of international opportunities and experiences for students
- Promote the health and well-being of students (undergraduate, graduate, and professional) as a foundation for academic and life success.
- Strengthen efforts to attract and educate an excellent and diverse body of undergraduate and postgraduate students
- Ensure academic excellence with clear spires of excellence
  - o Top talent
  - o Effective professional development
  - o High expectations and standards
  - o Inter-disciplinary and inter-organizational initiatives
  - 0 World-class infrastructure and support and a stimulating academic environment
  - o Outstanding library resources

## Courses of study at Tumkur University should generate proficiency in the following core academic competencies:

a. Disciplinary Knowledge: demonstrate a systematic or coherent understanding of an academic field of study

- b. Critical Thinking: apply analytical thought to a body of knowledge; evaluate arguments, identify relevant assumptions or implications; formulate coherent arguments
- c. Communication Skills: express ideas clearly in writing and speech; communicate with others using appropriate media; work effectively with others
- d. Scientific and Quantitative Reasoning: demonstrate the ability to understand cause-and-effect relationships; define problems; use symbolic thought; apply scientific principles; appreciate and solve problems of high degrees of ambivalence and ambiguity with no single correctanswer
- e. Self-Directed Learning: work independently; identify appropriate resources; take initiative; manage a project through to completion
- f. Information Literacy: access, evaluate, and use a variety of relevant information sources and foster a culture of data-intensive research
- g. Engagement in the Process of Discovery or Invention: demonstrate the ability to work productively in a laboratory setting, studio, or field environment.
- In addition, Tumkur University will strive to foster collegiality, civility, and responsible stewardship. Through academic studies and broader experiences on and off campus, Tumkur University graduates should attain proficiency in the following:
  - a. *Multicultural Competence*: have knowledge of the values and beliefs of multiple cultures; effectively engage in a multicultural society; interact respectfully with diverse others; develop a global perspective.
  - b. *Moral and Ethical Awareness*: embrace moral/ethical values in conducting one's life; formulate a position/argument about an ethical issue from multiple perspectives; use ethical practices in allwork.
  - c. *Self-Management*: care for oneself responsibly; demonstrate awareness of oneself in relation to others.

d. *Community Engagement*: demonstrate responsible behavior; engage in the intellectual life of the university outside the classroom; participate in community and civic affairs.

#### 2. Curricular Excellence

- 1. Learner-Centred Approach
- 2. Holistic Approach to Higher Education
- 3. Focus on In-depth Learning
- 4. Linkages to Research & Scholarship
- 5. Intensive Feedback, Evaluation and Review

#### 3. Examination, Assessment & Evaluation System:

- University would follow the Semester System based on comprehensive continuous internal assessment
- 2. The assessment criteria would be linked to specified learning outcomes
- 3. Typically, the components of assessment would include
  - a. Class Participation
  - b. Assignments/Quizzes/Presentation
  - c. Projects/Field Work
  - d. Practical/Lab work
  - e. Independent/ Group Work
- 4. Use the latest ICT technologies like web-enabled exams and RFID technologies for examination and evaluation work so that results can be declared instantly
- 5. Relative importance and weights of each components would be specified in the detailed course outline provided by the faculty concerned
- The assessment and evaluation process would be transparent as the teacher concerned would be required to return the marked / evaluated works to students and will have to show the answer scripts of end-semester examination, the University will not have compartmental/supplementary examination or revaluation/rechecking system.

#### 4. Administration

- 1. Creativity, innovation, leadership initiatives, nurturing of talent either at the individual level or at the level of Department and School would be prioritized
- 2. Conscious and deliberate efforts would be made to ensure that the university does not become over-bureaucratized
- 3. The administrative, non-teaching, technical and support staff would be groomed in a culture to assume the responsibility of supporting and facilitating the teaching and research activities
- 4 Organization of outreach programmes to expose and enlighten the local community through involvement in various educational, intellectual, cultural and sports activities and events
- 5. Awareness camps in the areas of development initiatives, people-participation, literacy, adult education, informal, continuous and non-formal education, health, hygiene and overall quality of life would be organized regularly under the banner of the outreach programme of the University
- 6. Training, skill up-gradation, skill development and skill recognition of the local population would be undertaken by the University through the Skill Development Centre and Community Polytechnic. These would be intended to enhance their employability and to provide opportunities for small entrepreneurship and self-employment of various kinds.
- 7. Capacity enhancement programmes such as coaching, guidance, career counseling, preparation for competitive examinations, personality development and leadership initiatives would be a regular feature of the University outreach activities

#### 5. Physical Infrastructure to be constructed:

Amenities & Common Facilities: Convocation Ground, Convention Centre, Community Centre, Shopping Complex, Health Centre & Dispensary, Central Canteens, Cafeterias/kiosks, Students' Activity Centre, Faculty Club, Staff Club

Training, Placement, Career Counseling, Industry Interaction: Training & Placement Office, Career Counseling & Guidance Centre & Director International Relations

Central Facilities for Research & Training: Computing & Information Technology Centre, Central Instrumentation Facility, Museum & Archives, Herbarium/ Botanical/ Herbal Garden

Facilities for Co-curricular & Extra-Curricular Activities: Gymnasium, Swimming Pool & Sports Complex, Arts Gallery, Auditorium, Open Air Theatre

#### 6. Research and Development Strategy

Tumkur University desires to develop world class knowledge base and skills in priority areas. To achieve this objective the university has established 29 research centres and hopes that the young and inquisitive faculty of the university will build the research centres into centres of excellence.

Tumkur University plans to undertake comprehensive development efforts in teaching and R&D in priority areas. In addition, plans are afoot to conduct integrated research in collaboration with the natural and social sciences in areas that are of national and global relevance. We also wish to establish cooperation agreements with scientists of other countries and private sectors in priority research areas.

We wish to benchmark our performance against accepted global indicators. In order to achieve the goals the following strategies will be adopted:

- 1. Continuous and sustained development of priority R&D areas
- 2. Development of new research areas and directions
- 3. Increasing the size of research groups and integrating research themes
- 4. Increasing the number of research publications and patents
- 5. Enhancing R&D cooperation
- 6. Improving the evaluation performance of research areas and research units
- 7. Effecting the transfer of knowledge by teaching and other modes of outreach

- significantly increasing the intake of doctoral students, raising the performance of doctoral studies programmes and creating a system for managing and evaluating the quality of doctoral studies;
- aiming to make doctoral-studies curricula interdisciplinary;
- 8. Increasing the number and volume of collaboration projects
- 9. Research Centres of the University will integrate with the University through interdisciplinary research groups, centres of excellence and the interdisciplinary doctoral studies programme.
- 10. Establishing a support services system facilitating knowledge transfer and a business incubator facility for protecting and marketing IP
- 11. Adequate R&D infrastructure will be established in all areas through sponsored projects, and viability-gap funding sources.
- 12. To implement the plan, the university will set up targeted funds to ensure financing of research activities.

#### Priority research areas that will be promoted are:

- New materials (collaboration between information technology and materials science);
- Systems biology
- Nutraceuticals
- Drought tolerance in food crops
- Novel Environmental technologies for sustainable development
- Power engineering and cloud computing
- Technological Innovations in biomedicine
- Research oriented towards enhancing business environment and supporting economic growth
- Comparative Cultural Studies and Philosophy of Education

#### 7. Financial Strategy

University will provide for a centrally held and managed contingency fund amounting to 5% of the operating budget each year. This contingency fund will provide a buffer against unexpected circumstances and support new initiatives.

Statutory and logistical arrangements will be made encouraging self-financing activities; both academic and non-academic, including the development of University hostels. A substantial amount of money will be earmarked for maintaining the physical infrastructure and landscape of the university. Clear pricing and costing strategy will be evolved for the University's revenues and expenditures taking into account the socio-economic challenges faced by the district.

The financial strategy will be constantly evaluated to ensure the long-term viability of the institution and to match resources with objectives over the short and medium terms. Internal process control and monitoring mechanisms will be put in place to comprehensively manage financial risks.

#### 8. Extension

The University wishes to design an outreach and community engagement programme to deliver tertiary education to marginalized and financially challenged individuals and communities. We also aim to foster knowledge, creativity, soft skills and spirit of inquiry leading to enhancing the employability quotient of the members of disadvantaged communities in Tumkur district. The focus of this programme will be to:

- Create and develop knowledge communities in the district
- Increase access to higher education
- Increase access to and use of Internet and other digital technologies
- Mentor local entrepreneurs and promoteinnovation
- Enhance economic opportunities for agricultural communities by training farmers in new technologies

- Reduce risk to agricultural producers associated with markets, regulations, trends, and changes in consumer preferences
- Increase awareness in application of alternative plant and animal production systems, including organic, value-added processing, bio-fuels production
- Increase health literacy and knowledge about the prevention and management of diseases
- Reduce risk behaviors by improving decision making, communication, and leadership
- Increase the level of formal educational attainment among youth of the district

#### 9. Information and Communication Technology

- Use information technology to create competitive advantage in education and research
- Use technology to enhance and expand educational services used by students
- Provide appropriate and adequate technology and training for all faculty members and staff to support the objectives of academic program
- Provide enhanced help-desk services and web-based self-support in information technology for students, faculty and staff

Tumkur University plans to implement a learning management system which will eventually facilitate sharing of systems, processes and data to improve:

- Delivery of enterprise IT services
- Management of IT human resources
- Implementation of consolidated IT services
- IT performance
- Purchasing performance
- Provide timely and accurate reporting for programs, enrollment, utilization
- Provide communications and computing infrastructure to support research centres, research clusters and worldwide research collaboration

## **VISION & MISSION**

## **UNIVERSITY DEPARTMENTS**

#### DEPARTMENT OF STUDIES AND RESEARCH IN SOCIAL WORK

#### **VISION**

To groom world-class professional social workers with democratic, ethical and humanistic outlook coupled with a deep sense of commitment to the amelioration of the marginalized sections of the society

#### **MISSION**

- To impart high quality education in social work coupled with equally productive field work, research and extension programs oriented towards social justice, human rights and sustainable development
- To inculcate leadership qualities in the students and make them contribute innovatively to socially useful productive work

- To produce quality social-work literature by way of publication of research articles and subject-related books
- To sensitize the students to the ideological, political and religious dimensions of the emerging Social Workprofession
- To initiate and encourage those programmes that contribute to the creation of a just and equitable society through education, training, research, policy dialogue, advocacy, social mobilization and community work
- To be recognized as a liaison centre between the Government and NGO schemes and the target sections
- To adapt a beyond-the-curriculum approach in addressing grassroot level issues and problems through various social work interventions and community camps

#### DEPARTMENT OF STUDIES AND RESEARCH IN POLITICAL SCIENCE

#### <u>VISION</u>

To provide an interdisciplinary thrust in studying social, political and economic changes in the contemporary world both at the regional and global levels and integrate value based and holistic education as part of fostering a sense of responsible global citizenship

#### **MISSION**

To inculcate in students a comprehensive understanding of both qualitative and quantitative research designs, their associated research methodologies and guide them to be able to identify the strengths and weaknesses of contemporary political systems

- To start a Diploma Course in Public Administration
- To institute Gandhian Peace Studies Chair
- To have student and faculty exchange programmes by having MoUs with other
   Universities at the national and the international level
- To conduct awareness and orientation programmes for elected representatives, administrators and policy makers on issues related to governance and development

#### DEPARTMENT OF STUDIES AND RESEARCH IN MATHEMATICS

#### **VISION**

To strive for academic excellence and attempt synergy with emerging areas of applied research in Mathematics

#### **MISSION**

To facilitate career building in mathematical sciences and foster research in frontier areas in Mathematics.

- To equip the students with abilities for research regarding the complex mathematical structures and their applications
- To promote interdisciplinary research on the applicative potential of mathematical principles in emergent areas of applied mathematics

#### DEPARTMENT OF STUDIES AND RESEARCH IN LIBRARY & INFORMATION SCIENCE

#### **VISION**

To impart high quality education in Library & Information Science with competence in meeting the challenges of the knowledge society

#### **MISSION**

- To stimulate and inspire students and researchers and inculcate in them the best skills, techniques, methods and procedures to tackle the critical challenges of the profession of Library & Information Science (LIS) in the digital and networked environment
- To develop professionals for information management and for advanced teaching in Library and Information Science.
- To carry out research on all aspects of information services and share its results through publications, extension services, seminars and conferences.

- To set up a state-of -the-art Information Communication Technology Lab
- To offer interdisciplinary courses dovetailing with Library & Information Science
- To stimulate research in the emerging areas of Library & Information Science
- To introduce new courses with industrial collaboration to suit the needs of the employment market

#### DEPARTMENT OF STUDIES AND RESEARCH IN HISTORY AND ARCHAEOLOGY

#### <u>VISION</u>

To transform the department into a Centre for Excellence in History and Archaeology and to train students as professionals and researchers for responding to contemporary challenges

#### **MISSION**

To develop academic resources and infrastructure facilities to promote quality research in Historical Sciences

- Establishment of a Museum of Regional and Cultural Heritage
- Investigations on local history and archaeology
- Publication of Departmental Journal and research articles
- Field-level training of students in Archaeology, Museology and Conservation
- To engage actively in preserving and restoring local monuments.
- To be recognized as the Nodal Data Centre of the Government of India and Karnataka for the documentation of Antiquities and Monuments
- To work in the preservation of the Local Oral History

#### DEPARTMENT OF STUDIES AND RESEARCH IN ENGLISH

#### **VISION**

To promote advanced studies and research in English language and literature and the humanities for building better perspectives towards understanding human cultures and forms of cultural production

#### **MISSION**

- To be a Centre for Excellence in Cultural and Comparative Studies
- To evolve an interdisciplinary approach towards teaching and research in English Literature and, in general, the Humanities

- To begin Certificate, Diploma and PG diploma Courses in the Humanities encompassing both ancient and contemporary thought on culture, aesthetics, language, linguistics and philosophy
- To set up a Language Lab for research and development of pedagogic resources

#### DEPARTMENT OF STUDIES AND RESEARCH IN COMMERCE

#### **VISION**

To impart futuristic Business Education comparable with global benchmarks, make students technologically and professionally well-equipped and socially responsible and committed to improving the quality of life in contemporary societies

#### **MISSION**

- To emerge as a centre for excellence in teaching, learning, training and research and contribute to the all-round development of the Indian world of business and its global associates through excellence in decision making and problem solving.
- To blend theoretical knowledge with practical skills in business to prepare the youth to attain holistic approach and eventually occupy key managerial positions in accounting, finance, international business, taxation, besides general management

- Establishment of a Centre of Excellence in Business Research
- MOUs with business establishments and academia
- To start add-on programmes in the following areas:
  - Maters Program in Business Studies (MBS)
  - Master of Finance and Accounting (MFA)
  - Master of Tourism and Administration (MTA)
  - Masters Diplomas in
    - Taxation
    - Human Resource Management
    - Marketing
    - International Business
    - Entrepreneurship

#### DEPARTMENT OF STUDIES AND RESEARCH IN BIOCHEMISTRY

#### **VISION**

To provide quality education, foster creative ideas and promote innovative research to meet the global challenges in Biochemistry

#### **MISSION**

To empower students with scientific temper and critical skills; build in them confidence and leadership qualities through innovative teaching and research methods and create awareness about the applicative potential of discoveries and inventions in Biochemistry for better healthcare

- To train the students for competitive exams such as CSIR, UGC, ICMR, and ICAR
- Enhancing infrastructure development to accommodate research scholars
- To patent the research carried out in the department
- Initiation of collaborative research activities (National / International Research)
- Participation in faculty exchange programmes in India and abroad

#### DEPARTMENT OF STUDIES AND RESEARCH IN ECONOMICS

#### **VISION**

Empowering students to be self-dependent and self-sustaining by imparting life-enriching skills and quality education in Economics

#### **MISSION**

- To equip students with skills and knowledge in applied economics enhancing their employability potential
- To enable the students to develop a holistic approach for analyzing and solving contemporary economic and social problems
- To conduct region and context-specific research in collaboration with other departments of the university/ research institutes/ agencies to aid policy making

- Developing innovative programmes and applied courses in areas crucial for agricultural and rural development and environmental audit and policies
- Setting up a Think Tank drawing from regional and national experts for an 'Economic Policy Watch'
- Establishing laboratory facilities for simulating crisis management in Economics
- Linking up with important research centres of national importance in developing collaborative research trainingprogrammes

#### DEPARTMENT OF BUSINESS ADMINISTRATION

#### **VISION**

To be a premier business institute in the country by achieving high order of excellence in teaching and research with focus on social justice and societal expectations in empowering students to be globally competent

#### **MISSION**

To impart quality management education in a very highly conducive academic environment where students acquire both managerial skills and spiritual values and thus prepare them to become better, useful and responsible citizens of the country

- Developing a Business Incubation Unit to train the youth in entrepreneurial skills
- Developing special courses and diplomas in rural management and agro-based industries with special focus on the local context
- Setting up a Business Management Laboratory to develop a robust case-study mechanism benchmarked with the best Business Schools in the world
- Liaising with industry and the developmental sector to create greater synergy between industry needs and curricula
- Setting up a Finishing School for future managers to help them work in diverse and challenging environments

#### **UNIVERSITY LIBRARY**

#### <u>VISION</u>

To provide the most up-to-date information, data and research available in the academia to meet the needs of the users by using advanced technology and innovation

#### **MISSION**

- Support scholars in achieving high standard professional development by focusing on user-centred information retrieval services
- Ensure better co-ordination in the integrated print and digital collection
- Measure collection adequacy levels and usage of collection to identify and fill-up collection gaps in a digital and collaborative environment
- Develop partnership with local and regional information providers in resource sharing
- To collect and organize systematically contents in a single location and mover towards "single window" concept
- Raise the University profile to global level by establishing and populating an Institutional Repository (IR) to capture, archive and publish academic research for open access on the net

- Library Automation
- M-Learning to support outreach programme
- Implementing RFID (Radio Frequency Identification) Technology
- E-Resource Management
- Development of Consortia with University Affiliated colleges
- Local Indigenous Knowledge Database
- GIS (Geographical Information Systems) in library

## **VISION & MISSION**

## UNIVERSITY COLLEGE OF SCIENCE

#### **DEPARTMENT OF BIOCHEMISTRY**

#### **VISION**

• To foster scientific thinking among the students and make them discover and appreciate the role of Biochemistry in our day-to-day lives

#### **MISSION**

 To enable students to identify thrust areas of research interest and develop intellectual and laboratory resources in them

- To equip the department with state-of-the-art infrastructure for conducting cutting edge research in Biochemistry
- Arranging student exchange programmes with other Universities both at the national and international levels
- Encouraging students to participate in Science tests with the models they have prepared

#### **DEPARTMENT OF MATHEMATICS**

#### **VISION**

To augment the abilities of students in mathematics through the use of innovative and learner-friendly approaches

#### **MISSION**

- To create adequate opportunities for students to understand and appreciate the applicative potential of mathematics
- To equip the students with abilities needed to handle the subject with greater levels of confidence

- To arrange visits to institutes of excellence in mathematics providing for the exchange of skills
- To coach students to participate in quizzes, events related to mathematics at national and international levels
- To carry out research leading to registration of patents and intellectual property

#### DEPARTMENT OF COMPUTER SCIENCE

#### **VISION**

To enable the students to integrate information and communication technology into their day-to-day life style, retaining their originality and individuality

#### **MISSION**

- To expose the students to the software industry requirements and help them to tune themselves to industry needs
- To employ beyond-the-curriculum approach in equipping the students to deal with important technical or societal challenges using the principles of computation

- Expanding internship opportunities for the holistic development of students' personality
- Starting add-on courses with focus on computers and other allied subjects
- Undertaking projects dealing with disposal of e-waste
- Organizing collaborative research with Computer-industry giants to churn out socially useful technical solutions

#### **DEPARTMENT OF ENGLISH**

#### **VISION**

To enhance the communicative abilities of students in English with reference to their accuracy levels and address their creative potential by a balanced use of language and literature

#### **MISSION**

- To equip them in language skills: listening, speaking, reading & writing through focused activities
- To adopt a beyond-the-text approach in dealing with the intricacies of language usage and analysis

- To encourage student participation in NIE (Newspaper In Education) related programmes in English at different levels
- To introduce creative corner, talent speak, Word buzz, Write-out and other competitions to showcase the abilities of students in English
- To start add-on courses in English like Diploma in Communicative English
- To engage the students in training the unemployed youth in the district in English

#### **DEPARTMENT OF CHEMISTRY**

#### **VISION**

To encourage interdisciplinary studies and indigenous research leading to the internalization of scientific thought and the sound principles of Chemistry

#### **MISSION**

- To attempt innovative technological practices in achieving scholarship in Chemistry
- To plan collaborative research in frontier areas with leading institutes of excellence

- Introducing new courses and specializations with emphasis on rapidly developing and changing demands of the industry
- To plan industrial visits for students to gain firsthand experience of the subject
- To enable students to attempt, with adequate support from in-house expertise and information acquired from research journals, synthesis of some useful compounds

#### **DEPARTMENT OF ELECTRONICS**

#### <u>VISION</u>

To become a centre of excellence for producing well trained, innovative human resources in electronics and produce research that meets the current needs of the national and international community

#### **MISSION**

- To inspire students to explore recent developments in the field of electronics and equip them to face future challenges in the field with confidence
- To train students in the diverse fields of electronics so that they can contribute to the knowledge economy and provide modular technological solutions to everyday problems

- To start add-on programmes in hardware and software and PG Diploma courses
- To develop successful entrepreneurial skills among students and make them self-reliant
- To undertake consultancy projects at the international level
- To apply for patents and register intellectual property in electronics research and product development

#### **DEPARTMENT OF PHYSICS**

#### **VISION**

To synergise ideas and concepts from diverse specializations in the physical sciences and develop a genuine spirit of enquiry in students through fusion of research and education

#### **MISSION**

- To equip students with an awareness of the advancements and innovations in the field
- To develop scientific thinking and analytical abilities leading to better understanding of concepts in physics

- To start add-on programmes in Nuclear Physics, Classical Mechanics, Quantum Mechanics, Material Science
- To encourage students to take up projects and work on them in consultation with the faculty
- To arrange student exchange and faculty exchange programmes with other Universities at national and international levels
- To work on consultancy projects and apply for registration of patents and intellectual property

#### **DEPARTMENT OF ZOOLOGY**

#### **VISION**

To enable students to understand and appreciate the life principle that runs through all living beings, and develop in them interest in zoological research

#### **MISSION**

To provide a broad base to the subject by extending it beyond the textbooks, manuals and laboratories and project it as part of everyday life, thereby encouraging an experimental and critical approach

- To supplement the theory base with adequate on-the-field tasks by studying creatures in their natural habitats
- To arrange for dissemination of information related to research in the discipline through periodical seminars, conferences and workshops
- To innovate in the area of artificial cell division and DNA synthesis

# **DEPARTMENT OF KANNADA**

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|                          | PÀŧÀBqÀzÀ°è ŞgÉ¢gÀĪÀ «cÁÕtÀ Á»vÀåªÀtÀÄI CzsÀåAilltÀzÀ CAUÀªÀ£ÁBV ªÀiÁqÀĪÀÅzÀgÀ ªÀÄÆ®PÀ «zÁåyðUÀ¼À°è ªlleÁÕ¤PÀ<br>ªÀÄ£ÉÆÃ¨sÁªÀªÀ£ÀÄB ¨É¼É¸ÀĪÀÅzÀÄ                                                                                                                                                                                                                                                                    |
|                          | PÀŁÀBQÀ PÀ°PÉAili ªÀÄÆ®PÀªÉ eÁUÀwPÀ, ¸ÀàzsÁðvPÀ ¸À¤ßªÉñÀUÀ½UÉ vÉgÉzÀÄPÉÆ¼ÀÄĵªÀAvÉ ªÀiÁqÀĪÀÅzÀÄ                                                                                                                                                                                                                                                                                                                      |
| «"sÁUÀzÀ PÁAiÀÄðAillAvÀæ |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| •                        | ¸Á»vÀå°ÉA§ eÁÕ£À±ÁSÉAill °ÀÄÆ®PÀ °ÉÊZÁjPÀ ¥ÀæeÉÖAill£ÀÄß, ¸ÀÈd£À²Ã® ¸ÁzÀåvÉUÀ¼À£ÀÄß «PÁ¸ÀUÉÆ½¸ÀİÀÅzÀÄ. D °ÀÄÆ®PÀ<br>«zÁåyðUÀ¼À£ÀÄß QæAiliÁ²Ã®UÉÆ½¸ÀİÀÅzÀÄ                                                                                                                                                                                                                                                           |
|                          | «zÁåyðUÀ¼À "sÁµÁ ¸ÁªlixÀðåzÀ eÉÆvÉUÉ ¸ÀAªÀ°À£À P˱À®åªÀ£ÀÄl ªÀȢݸÀĪÀÅzÀÄ                                                                                                                                                                                                                                                                                                                                              |
|                          | C£ÀĪÁzÀ ¸Á»vÀåzÀ ªÀÄÆ®PÀ C£Àå¢ÁŌ£À²¸ÀÄŮUÀ¼À£ÀÄß ¥ÀjZÀ¬Ä¸ÀĪÀÅzÀÄ. ¥Àæ½ÀÝ ªÀåQÛUÀ¼À «ZÁgÀUÀ¼À£ÀÄß F ªÄÆ®PÀ<br>vÀ®Ä¦¸ÀĪÀÅzÀÄ                                                                                                                                                                                                                                                                                           |
| <u>UÀÄjUÀ½</u>           | Á <u>ÀÄ</u>                                                                                                                                                                                                                                                                                                                                                                                                         |
|                          | «zÁåyðUÀ¼À°ègÀĪÀ¸ÀÈd£À²Ã®vÉAiĤ£ÀÄЫ UÀÄgÀÄ <b>w¹</b> vÀgÀ¨ÉÃwAiÀÄ£ÀÄЫ ¤ÃqÀĪÀÅzÀÄ                                                                                                                                                                                                                                                                                                                                     |
|                          | ¥àoÉåÁvÀgÀ «µÀAiÀÄUÀ¼À°è «zÁåyðUÀ½UÉ D¸ÀQÛ ªÀÄÆr¸ÀĪÀÅzÀÄ ªÀÄvÀÄÛ wAUÀ¼ÁAvÀåzÀ°è CªÀjAzÀ¯ÉÄ «ZÁgÀ «ðÀÄAÌ K¥Àðr¸ÄĪÀÅzÀÄ                                                                                                                                                                                                                                                                                               |
|                          | «zÁåyðUÀ½AzÀ ¥ÀoÀ嫵ÀAill PÀÄjvÀAvÉ UÀÄA¥ÀÅ ZÀZÉð °ÁUÀE «ZÁgÀ¸ÀAQgÀtªÀ£ÀÄß K¥Àðr¸ÀĪÀ ªÀÄÆ®PÀ «µÀAill<br>¥ÀjtÂwAill£ÀÄl °ÉaѸÀäªÀÅzÀÄ                                                                                                                                                                                                                                                                                   |
|                          | eÁUÀwPÀ £É-ÉAiÀÄ°È ¥Àæ,ÀÄÛvÀªÁVgÀĪÀ aAvÀ£ÉUÀ¼À£ÀÄI ¥ÁædÕjAzÀ «zÁåyðUÀ½UÉ ¥ÀjZÀ¬Ä,ÀĪÅÅzÀÄ                                                                                                                                                                                                                                                                                                                            |
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|                          | «zÁåyðUÀ¼À°ègÀĪÀ £ÁlåPÀ¯É, £ÁlPÀPÀ¯É, UÁAiÀÄ£ÀPÀ¯É °ÁUÀÆ ¸ÀÈd£À²Ã® ¥Àæw°sÉUÀ½UÉ DzÀåvÉAill ªÉÄÄgÉUÉ<br>CªÀPÁ±ÀUÀ¼À£ÀÄß PÀ°à¸ÀĪÀÅzÀÄ                                                                                                                                                                                                                                                                                 |
|                          | ¸ÀàzsÁðvÀāPÀ ¥ÀjÃPÉĕUÀ½ÚÉ C£ÀÄPÀÆ® PÀ°à¸À®Ä «±ÉõÀ vÀgÀ°ÉÃw ²©gÀUÀ¼À£ÀÄN DAiÉÆĀf¸ÀİÀÅzÀÄ                                                                                                                                                                                                                                                                                                                             |
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#### **DEPARTMENT OF BIOTECHNOLOGY**

# <u>VISION</u>

To transform the department into a globally competitive Centre for Excellence in advanced biotechnology by engaging in research and training

# **MISSION**

- To engage in interdisciplinary study and research in emergent and significant areas
- To equip students with the creative abilities required to keep pace with the everexpanding scientific knowledge base and needs

- To utilize the expertise available in IISc and IITs through exchange programmes
- To equip the students with entrepreneurial skills needed in the field
- To plan research collaboration with Biotechnology industries
- To facilitate on-line interaction of students with the experts in the field across the globe

# **DEPARTMENT OF BOTANY**

#### **VISION**

To enable the students to respect and conserve biodiversity and innovate eco-friendly measures in order to work towards a green planet

#### **MISSION**

- To make them aware of the indispensable role played by the flora in our life
- To equip the department with state-of-the-art botanical garden with several species of medicinally useful plants

- To raise awareness about the importance of cultivating medicinally useful plants and shrubs in the local population through planned community interaction programmes
- To encourage every student to maintain a 'Herbictionary' (a collection of various plants with the names, uses and special features) of locally available plants
- To plan collaborative research with Government or Non-government organizations like Ayush, Central Institute of Aromatic and Medicinal Herbs, Himalaya, Kottaikal Ayurveda Vaidyashala and innovate preventive measures for various diseases and disorders

# **DEPARTMENT OF MICROBIOLOGY**

# **VISION**

To create a multi-cultural and inter-disciplinary team of researchers and Post-Graduate students that focuses on exploration of opportunities in microbiology and plant biology

#### **MISSION**

To provide the life science community with technically skilled human resources, environment-friendly products and practices and lab to land practices to popularize scientific methods

- To establish well equipped and self-sustaining under graduate and post graduate microbiology laboratories in the next two years
- To establish state-of-the-art research lab through project funding in the next three years
- To be recognized as centre for high quality microbiology teaching by initiating new skill development programmes in collaboration with other institutes and industry in the next four years
- To establish a one-of-its-kind meta proteomic reference centre for endophytic microbes in the next five years
- To have several international collaborations with institutes and universities of repute
- To register patents and intellectual property
- To establish a centre for high performance meta-analysis of microbes with favourable traits
- To publish a research journal on vegetative desiccation tolerance and fungal physiology
- To have separate building dedicated to high throughput microbiology and plant biology research and teaching programmes
- To start a business incubator facility which will exclusively market the IP generated through research

# **VISION & MISSION**

# **UNIVERSITY COLLEGE OF ARTS**

#### DEPARTMENT OF HISTORY AND ARCHAEOLOGY

# **VISION**

To provide students with a scientific approach in validating the knowledge of the past to understand the present

# **MISSION**

- To enable the students to visualize the grand knowledge base of History and its applicative potential in interdisciplinary studies
- To help students discover the novelty of concepts in dealing with History and Archaeology

- To promote research activities through Centre for Public History and Archaeology
- To undertake research and project works sponsored by various funding agencies
- To conserve and promote heritage consciousness among the local public
- To set up an archeological and historical museum in the Campus

#### **DEPARTMENT OF SOCIOLOGY**

# <u>VISION</u>

To promote a better understanding of society through an interdisciplinary approach to the subject and open up frontier areas for research

# **MISSION**

To strengthen the understanding of sociological issues and help students apply that knowledge in addressing social problems

- To organize community awareness programmes on issues like health, women development and law through extensive field work
- To arrange for the dissemination of information related to the redressal of social problems by organizing seminars, conferences and symposia
- To liaise with the Social Welfare Department at the state and the central levels and work towards the effective implementation of various schemes launched for the amelioration of social problems in rural India
- To institute Chairs in the names of veterans in the field and offer fellowship for promoting research activities

#### DEPARTMENT OF POLITICAL SCIENCE

# <u>VISION</u>

To provide students with a strong base in the subject to understand, analyze and debate the social, political and economic situation at the national and the global levels

# **MISSION**

To facilitate conditions conducive for high quality research and education in the frontier areas of Political Science

- To encourage moot-parliament and moot-court debates among students regarding issues concerning the political stability of a nation
- To equip the department with audiovisual and digital resources containing documents of various trendsetting political debates both at the national and international levels

#### **DEPARTMENT OF ECONOMICS**

#### **VISION**

To encourage students to develop a broad and interdisciplinary view about economic processes and systems leading to a better understanding of the changing policies of national and global economy

# **MISSION**

To strengthen the academic content delivery system through focused innovative methods fostering entrepreneurship skills among students

- To create and maintain conducive environment for high quality research
- To bridge the gap between industry and academia through effective industry-institute partnership programmes
- To strengthen the base for an economic strategy to promote economic wellbeing through active planning
- To work in collaboration with NGOs and other organizations to address local economic issues

#### **DEPARTMENT OF JOURNALISM**

# **VISION**

To groom journalists with a combination of advanced professional skills and humanitarian outlook

# **MISSION**

To create a sense of social responsibility among the prospective journalists and equip them to face the challenges offered by the acutely competitive world of the media

- To encourage students to take up field work by writing for newspapers and magazines
- To organize frequent workshops and special lecturers on effective communication, photography and feature writing by eminent academicians and senior journalists
- To start postgraduate courses and diplomas in journalism
- To equip the department with a full-fledged studio and to start a community radio

#### **DEPARTMENT OF ENGLISH**

#### **VISION**

To enhance students' communicative ability, improve their confidence levels in English and equip them to face examination challenges and respond to market requirements

# **MISSION**

To develop among the learners proficiency in the skills of language listening, speaking, reading and writing

- To publish book reviews, research articles authored by students and showcase the talents of students through wall magazines and creative corner
- To establish a digital multimedia language laboratory in the department
- To start add-on programmes like post-graduate diplomas and certificate courses

# **VISION & MISSION**

# **UNIVERSITY RESEARCH CENTRES**

#### CENTRE FOR EXCELLENCE IN INDUSTRIAL ELECTRONICS

# **VISION**

To be a Research Centre at the cutting-edge of science and technology and to produce globally recognized research and knowledge in the domain of Industrial Electronics

### **MISSION**

To adapt a holistic approach to pursue industry-based electronics research

To facilitate dissemination of information and knowledge that benefits industrial electronics research.

- To established collaborations with institutions, laboratories and industries of national/international repute
- Toidentify and promote ancillary industrial units for large/medium entrepreneurs in the region
- To evolve into a consultancy cell for small scale industries in the region
- To contribute to the Socio-economic development of rural areas
- To design and develop cost-effective industrial electronics solutions based on advanced scientific principles
- To support the development of an industrial base for contemporary production processes and technologies in the field of electronics & IT
- To offer counseling and guidance to new entrepreneurs in setting up small scale electronic and IT units

#### CENTRE FOR BIOSCIENCE AND INNOVATION

#### **VISION**

To facilitate quality education in the biosciences and foster innovative research in the area to meet contemporary global challenges

# **MISSION**

To develop into an institutional leader in innovative research and discoveries in various fields of life sciences

- Establish a state-of-the-art laboratory facility in Karnataka for Bioscience research
- Develop academic collaborations with leading life science institutions in the country to promote inter-institutional projects and educational outreach programmes
- Develop an innovative interdisciplinary PhD programme in Biosciences
- Initiate collaborative research activities with highly reputed research institutes/universities in India and abroad

#### CENTRE FOR CONSERVATION CONVERGENCE

# **VISION**

To develop into a platform for issues related to conservation of diversity in nature and adopting new methodologies for environmental conservation

# **MISSION**

To provide research support and evolve a research portfolio with the aim of protecting ecological biodiversity

- Biodiversity conservation through the enumeration and documentation of endangered, extinct and rare plant and animal species
- Exploration of ecosystem dynamics through modelling system
- Harnessing traditional plant medicines and the promotion of "semi-wild" plants cultivation
- To devise conservation methodologies congruent with ecological conditions
- To define the boundaries of the resources and the user groups
- To devise accountability mechanisms for monitors
- To establish low-cost mechanisms for conflict resolution in environment-related issues

## **CENTRE FOR ADVANCED MATERIALS**

# **VISION**

To attain excellence in advanced materials research of intellectual and technological importance to the society

#### <u>MISSION</u>

Fostering innovative research in advanced material science and technology.

# <u>GOALS</u>

- To create awareness regarding emerging thrust areas of materials science and their prospective global opportunities
- To develop and train highly competitive and skilled human resource of international standards in the area of advanced materials
- To attain premier international research centre status in the area of advanced materials
- To develop partnerships and strengthen industry-research centre interface
- To enhance the commercial viability of materials developed at the centre

#### CENTRE FOR COMMUNICATION PROGRAMMES

#### **VISION**

To design and implement strategic communication programs and help policy makers to formulate appropriate policies for research in health and health information

# **MISSION**

- Design and implement strategic communication programs and create awareness in general public about health and hygiene
- Enhance access to information and the exchange of knowledge which is still a distant dream for majority of the people who are highly vulnerable and easy victims to contagious and infectious diseases
- Work towards the dream of providing absolute safety in the area of child and mother care in rural context

- To design and develop MEMS based solutions for Indian industries and research laboratories/ organizations
- To play a pivotal role in the identification and transformation of ailing and deprived strata in the society into a healthy and stronger one
- To bring down mortality rate of mother and child
- To establish a full-fledged media centre for health related issues
- To collaborate with research centres, government and non-governmental organizations and the general public for eradication of dreaded diseases like AIDS and tuberculosis

#### CENTRE FOR ECONOMIC POLICY RESEARCH

# **VISION**

To support the development of economic policy options that promotes economic growth and social equity

#### **MISSION**

- To study the socio-economic conditions of the people of Tumkur district and suggest suitable policy options
- To study the problems of SC/ST/OBC and other deprived groups of the society.
- To serve as a warning mechanism on important micro and macroeconomic issues of the nation

- Conducting training, extension, education, and interactions programmes to create avenues for social and economic mobility
- To create awareness about various government schemes to promote the livelihood and social wellbeing of underprivileged classes
- To become a leading centre for economic policy research

#### CENTRE FOR EDUCATION AND RESEARCH

# **VISION**

To evolve into an inter-institutional platform for research on issues relating to philosophy of education, culture and cognition

# **MISSION**

- To develop higher-education research as a focus area
- To provide models for research-intensive pedagogy, assessment and curriculum design.
- To develop strong links between the practice and philosophy of education

- Establishing a Higher Education Resource Cell with specific emphasis on developing regional language resources for higher education
- Incubating and supporting research in the area of Comparative Philosophy of Education
- Developing a precedent model for peer-to-peer learning and continuous learning by designing college and university-level interventions
- Establishing an Inter-University Consortium for higher education research, pedagogic reform and policyanalysis
- Establishing a Masters and a Doctoral Programme in Philosophy of Education

## CENTRE FOR FINE ARTS, ANIMATION AND DESIGN

# **VISION**

Develop art education as a focus area with special emphasis on comparative analysis between concepts, techniques and practices in traditional and modern art

#### <u>MISSION</u>

To develop new possibilities for the professional application of Arts and recognize ongoing conceptual and technical changes in art and to incorporate those changes in to curricula

- To document the Audio and Video recordings of Dr. M. S. Subbulakshmi and publish books about Dr. M.S. Subbulakshmi
- To empower students to express their deepest experiences spiritually, emotionally, and intellectually through involvement in the creative process which demands confronting one's self, beliefs and value systems.
- To encourage and provide the creative and education opportunities for students to offer their creative work for an audience's understanding, appreciation, and evaluation, so that students understand that art is an important way of dialogue between peoples and not an end in itself.
- To support artists in their creative endeavors by providing them suitable public platforms and support systems

#### CENTRE FOR HUMAN RESOURCE DEVELOPMENT

# <u>VISION</u>

To facilitate and foster research and spirit of inquiry in the field of Human Resource Development

# **MISSION**

To strive to mobilize and use public resources to pursue Human Development and thereby achieve social progress, equity, sustainability and human security

- To advocate the use of Human Development Indices in National Planning documents
- To enable Human Development Index as a power tool by making comparisons within and between countries
- To make Human Development Reports become an important policy advocacy tool (for NGO's, Journalists, Policy makers, Academia)

# CENTRE FOR LANGUAGE PROFICIENCY AND TRAINING IN PERSONALITY DEVELOPMENT

# <u>VISION</u>

To promote research in tertiary pedagogy for enhancing linguistic skills and aid classroom learning

# **MISSION**

To develop language competence and facilitate acquisition of personality skills enhancing student's employability

- To offer Diploma / P G Diploma courses in Technical Writing and interdisciplinary subjects relating to life skills
- To offer courses in English for Academic Purposes
- To establish a state-of-the-art language laboratory on the campus
- To offer diploma and Post graduate diploma courses in foreign languages
- To offer Post Graduate courses in Linguistics, Translation Studies and English Language Teaching
- To conduct teacher training programmes in rural sectors

#### CENTRE FOR NANOSCIENCE RESEARCH

# **VISION**

To carry out cutting-edge research in frontier areas of Nano-science and provide quality education to achieve excellence in the global scenario

# **MISSION**

- To conduct focused research in basic & applied fields of Nanoscience
- To translate these results for social innovation initiatives
- To contribute to emerging technologies of leading applications

- Create infrastructure for carrying out frontiers of research in Nanoscience
- Encourage and train human resources for intellectual property generation and explore newer areas of research
- Attract and nurture young minds for taking up Nanoscience R&D as career
- Undertake capacity building of human resource development in nanoscience and nanotechnology development
- Provide conducive environment for creation of commercializable technologies.
- Collaborate with national and international researchers/industries for the development of high-end technologies

#### CENTRE FOR PROJECT MANAGEMENT

# **VISION**

Develop into a Project-Management Research and Training Centre with on-site services for project incubation and monitoring

#### **MISSION**

To identify good practices and initiatives and provide real-time project-development support for new initiatives to enhance community welfare and quality of life

- To conduct awareness programmes among U.G. students in project management and entrepreneurship
- To undertake, promote and co-ordinate both fundamental and applied research on improved project management and planning
- Develop a doctoral programme in Project Management with special focus on rural sector industries and social innovation programmes
- Streamline developmental projects by bringing various stakeholders including governmental and non-governmental agencies and industrial representatives to share their experiences in development work and industrial management

#### CENTRE FOR RURAL SOCIAL DOCUMENTATION

# **VISION**

To support teaching, learning, scholarship, and integrated education by providing access to, and facilitating the use of a broad array of information resources

# **MISSION**

To be an innovative university library and data centre aligned with the goals of an innovative university

- Provide instruction on library and information literacy skills aimed at facilitating research and developing an individual's ability to select, evaluate and use information resources
- Provide training in the use of information resources and technology to enhance teaching, learning, and scholarship and to improve productivity and service quality
- Use technology to improve the delivery of programs, services, and resources, especially in information-scanty rural areas
- Engage the larger student community, including the alumni, in programs that enhance the co-curricular life of the University and build long-term support for the Library
- Allocate resources in accordance with strategic priorities; evaluate and assess programs, resources, and services on a regular basis, using the evaluation as a basis for continuous improvement; strive for effective communication and collaboration, responsible decision making, and fiscal responsibility at every level
- Provide facilities that promote effective study and research; ensure appropriate storage, maintenance and preservation of information resources; enhance Library and other Information Services' staff productivity and collaboration; and serve as a community gathering place for the exchange of ideas

#### CENTRE FOR POLITICAL AND SOCIAL RESEARCH

# **VISION**

To create a forum to impact deliberations and participation on issues of civic importance

# **MISSION**

- To enhance interface between social science academia and civil society organizations
- To promote research in emergent areas in Social and Political Theory and Governance

- To offer certificate courses on Citizenship, Women's empowerment and rights, globalization and poverty to students, media professionals, civil servants and the general public
- To establish a feedback loop between local self-government bodies and nongovernmental institutions in the region
- To contribute to the policy-making process by carrying out public policy analysis, fostering substantive policy dialogue among governments, academia, civil society, business, and the public
- To establish a Training Cell for volunteers and workers in NGOs, CBOs, CSOs and other such organizations

#### **CENTRE FOR SPACE SCIENCES**

# **VISION**

To provide a platform for development of skill and knowledge in the advanced application area of Space Science

#### **MISSION**

The Centre aims to promote Research in space science with the use of remote sensing and Geographical Information System (GIS). The centre is dedicated for promotion of space awareness, education and research

- Conduct projects on disaster management, resource development and environment monitoring
- To educate students to conduct research with the use of various satellite data and generate updated spatial maps and resource data
- Raise the level of aerospace higher education and training programmes in Universities and to expand the interest and resources in Space and Aeronautical sectors
- Utilize space data for Rural Development, National Resources management, Disaster Management and Environmental Assessment
- Enhance significantly the Geographical Information System (GIS) capabilities for both national and regional development

#### **CENTRE FOR WOMEN'S DEVELOPMENT STUDIES**

# **VISION**

To revitalize women's welfare programmes on the principles of democracy and social equity and disseminate knowledge about the changing dynamics of gender relations in our society

#### **MISSION**

Developing Gender Education with the aim of making women equal participants and agents in socio-political change

- To conduct need based women-empowerment and gender sensitization programmes
- To create awareness among the students on women's rights, status and to critically analyze women's issues
- To undertake, promote and co-ordinate both fundamental and applied research on women and development
- To establish a women's cell in all affiliated colleges of Tumkur University
- To introduce gender perspectives in the curriculum of all disciplines.
- To introduce certificate / diploma courses in women studies
- To introduce a Master's programme in women studies at the postgraduate level

#### CENTRE FOR INDUSTRIAL COMPUTER

# <u>VISION</u>

To be a catalyst for research, invention, innovation, education, public awareness, entrepreneurship and economic growth by sustaining the vitality of existing industry, as well as to attract and develop new industries

#### **MISSION**

To design, develop and implement effective information systems, technologies and services in order to facilitate and enrich the educational process and scientific research

- To undertake research through collaborative efforts with colleges, industries, and government units and individuals in Industrial Computing
- To offer of diverse and complementary academic university programs of study at both undergraduate & graduate levels
- To facilitate automation of all the administrative and financial functions of the University
- To be a repository of state-of-the-art information assurance of resources

#### CENTRE FOR PUBLIC HISTORY AND ARCHAEOLOGY

#### **VISION**

The centre for Public History and Archaeology aims to get recognized as a repository of all forms of past knowledge systems available in the region, and envisages an active future where the centre will be the nodal agency for carrying out important researches on historical sciences

#### **MISSION**

The centre plans to initiate complete documentation of all material culture remains and oral history of Tumkur district, and open new vistas for the researchers and students of the region. On the basis of this initiative, the centre aims to initiate and promote multi-dimensional and interdisciplinary projects which will benefit the whole society

- Promote archaeological and anthropological research on the new and old worlds
- Conduct archaeological investigations for federal, state, and local governments as well
  as private entities as envisaged by the laws of the country
- Assist in the cultural resource management of tangible and intangible heritage in association with the Government
- Train the students in the field of archaeology through direct research experience
- Support public education through infrastructure and resources
- Initiate investigations on the nature of historical remains of Tumkur District through new explorations and excavations
- Arrangements of workshops, seminars and conferences on oral history and archaeology for the benefit of the scholars and public
- Establish basic infrastructural facilities at the centre with its own building, state-of-the art laboratory, library, audio-visual and other technical equipment and manpower
- Establish and promote a Chair of Archaeology at the Department of History and Archaeology, Tumkur University
- Open avenues of publication for new researches on the region

#### CENTRE FOR MICRO-ELECTRO-MECHANICAL SYSTEM

# <u>VISION</u>

To establish an innovative technical centre for research and development in the field of MICRO-ELECTRO-MECHANICAL SYSTEM with a high level of practical approach

### **MISSION**

- To become a leading product innovation centre in MEMS technology
- To develop and enhance the understanding of experimentally observed fundamental principles and processes governing MEMS/NEMS performance by carrying out applied research
- To experimentally demonstrate validated lifetime predictive models for reliable device designs and systemdesigns

- To explore the world of Micro Electro-Mechanical Systems (MEMS) by understanding its design and fabrication aspects
- To bring the research scholars and industrialists on a single plat form through seminars, conferences and collaborations
- To develop a world class research laboratory at the centre

#### CENTRE FOR RURAL POVERTY ALLEVIATION AND COMMUNITY DEVELOPMENT

# <u>VISION</u>

Linking Social Science with social change by acting as a pathway between the university and the community.

#### **MISSION**

To broaden the University curriculum by offering academic courses and research programs, which focus on poverty related issues, and to nurture and facilitate collaborative research and educational efforts among the university faculty

- To address the issues like Poverty and Hunger in the region by carrying out applied research
- To provide an interdisciplinary forum for examining poverty, work and opportunity issues
- To train the next generation of community leaders
- To develop research projects and undertake comparative studies on poverty and rural development
- To develop new approaches and methodologies suitable for addressing poverty and rural studies
- To provide consultancy services and technical aid to preserve the cultural heritage of rural communities

#### CENTRE FOR E-COMMERCE AND COMMUNICATION

# <u>VISION</u>

To be a centre for excellence in promoting research and development in the field of ecommerce and communication

### **MISSION**

To develop high quality e-commerce standards and facilitate effective communication by offering software development services to the stakeholders

- Build an e-commerce and online retail website that provides a high quality service at a competitive price
- Offer customized services to business entrepreneurs
- Collaborate with other research organizations for the promotion of centre's activities and undertake research projects for achieving the goals of the centre

#### KANNADA RESEARCH AND INFORMATION CENTRE

#### **VISION**

To be a leading centre in Kannada Studies by acting as a catalytic agent in promoting quality Kannada language education and communication, and conducting research on Kannada culture, language and literature

#### **MISSION**

- offering Kannada language services like translation, machine reading and technology development for web-based services in Kannada
- Providing cutting-edge research services to students and researchers through setting up data repositories and a digital library of Kannada and Kannada-related resources
- Networking institutions working on Kannada culture through educational activities and cultural programmes
- Establishing a unique Kannada Cultural Museum to exhibit ancient manuscripts, folk artifacts, and antiques relating to Kannada tradition

- Bringing out a periodic newsletter on Kannada Studies for the benefit of researchers and students
- Publishing high quality and original research in the form of books
- Setting up a well-equipped Kannada digital library
- Creating a complete data bank of resources relating to Kannada with real-time updating facility to work on the lines of a state-level permanent repository
- Establishing a Kannada literature and culture information centre
- Instituting at least three new chairs for Kannada Studies in the University

# CENTRE FOR SUPPLY CHAIN MANAGEMENT AND E-COMMERCE

# **VISION**

The Centre proposes to be an innovation platform for Research, Development and implementation of Supply Chain Management principles in various Industries

# **MISSION**

- To serve Industries as a resource base through practical training in supply chain management
- To provide and share knowledge and expertise to Industry as well as academicians

- To study practices of supply chain management in the organized sector
- To learn the practices of supply chain management in various organizations
- To create awareness among various organizations about supply chain management
- To create a platform for organizations in the supply chain management practices.
- To identity opportunities for employment in the organized sector
- To educate the workforce through extension activities like national conference, national seminar, workshops and job training

#### **CENTRE FOR QUALITY MANAGEMENT**

# **VISION**

To be an innovative platform for research, development and implementation of Quality Management practices in Industry and Academics

#### <u>MISSION</u>

To serve as resource base to industries and academia by providing practical tools of Quality Management

- To incorporate latest Quality Management concepts in the curriculum of MBA/M.Com
- To organize special lectures on the latest developments in the field of Quality Management
- To undertake projects on the latest issues in the field of Total Quality Management
- To Bring out Newsletter for Research Centre activities on quarterly basis.
- To provide consultancy to small scale and medium scale industries in quality aspects
- To start Postgraduate Diploma and Certificate courses in Quality Management Specialization
- To apply for Membership of Quality Council of India and have an MOU with QCI

# **CENTRE FOR DISASTER MITIGATION AND NATURAL CALAMITIES**

# **VISION**

Towards empowering communities to holistically understand and manage disasters and natural calamities so as to promote sustainable development and integrated wellbeing

#### **MISSION**

To envision, design and implement integrated approach to disasters and natural calamities through multidisciplinary research, education, training and field action projects to enable sustainable and inclusive development

- To study the present condition of disaster-proneness and preparedness of the region
- To evolve locally relevant disaster mitigation measures
- To generate awareness and promote preparedness among the communities to face disasters and natural calamities by conducting seminars/workshops/conferences and extension activities
- To ensure people's participation in disaster management by way of regular training and education by networking with relevant government and non-government agencies, funding agencies, SHGs, workers in the unorganized sector and other stakeholders in the region

#### CENTRE FOR SCIENCE AND TECHNOLOGY FOR RURAL DEVELOPMENT

#### **VISION**

To provide effective platforms for technology transfer for sustainable rural development and evolve models of holistic development

#### **MISSION**

To give technological assistance to the rural populace for achieving rural industrialization and improves the quality of life in rural areas

- Identify problems of the rural sector requiring science and technology inputs
- Generate a sustainable technology base by blending appropriately modern and traditional knowledge
- Standardization of protocols for low-cost bio-fertilizers production
- Undertake appropriate teaching, research, information dissemination and outreach related activities and network with other institutions, voluntary agencies, government organizations, and village industries, for achieving rural industrialization and improve the quality of life in rural areas.
- Development of solar powered refrigerator for use in rural areas
- Study the impact of modern bio-technology on agriculture, livestock production and food industry.
- Development of portable gasifier cooking stove suitable for community cooking by facilitating on-line biomass feeding and proper regulation of gas generation and its burning
- To design and develop cost-effective industrial electronics solutions based on advanced scientific principles for Indian industries and research laboratories / organizations

#### CENTRE FOR VLSI DESIGN

# **VISION**

To become a centre for excellence in Education and Research in VLSI and Embedded System Design Technology and meet the needs of fast growing VLSI industries

#### **MISSION**

Design and Implement VLSI devices in wide range of application areas using state-of-the-art tools and technologies

- To carry out research and guidance in VLSI related areas by establishing VLSI Design Labs, Resource Centres and Participating Institutions
- To provide quality training and research project services in VLSI Design, Embedded Systems, System-On-Chip (SoC) and Network-On-Chip (NoC) technologies
- To have sustained linkage with industries
- To conduct quality research and consultancy
- To develop "Centre for Excellence" in the design and implementation for applications in Communication, Embedded System and VLSI Design

#### CENTRE FOR INDUSTRIAL AND APPLIED MATHEMATICS

# **VISION**

To undertake scientific research, development, and education in the field of applied mathematics to promote the use of mathematical models, methods, and results in industrial activities

### **MISSION**

- To conduct research in advanced mathematical, computational and numerical techniques.
- To equip the faculty of Mathematical Sciences and graduates with necessary skills so as to enable them to be effective participants in the industry and academia interface.

- To contribute to the enhancement of Research and Development (R&D) industry in Karnataka
- To support and broaden the relationship between mathematics and computation and address the problems posed by the use of the computer through mathematical tools and methods
- To collaborate on research projects forming "hotspots" at the interface between applied mathematics and industry

#### **CENTRE FOR BIO-INFORMATION**

# **VISION**

To be recognized nationally and internationally as a centre of excellence for comparative –omic technologies and itsapplications.

#### **MISSION**

Application of comparative -omic technologies in answering problems related to plant, animal and microbial physiology.

- To establish a one-of-its-kind meta proteomic reference centre for endophytic microbes in the next five years
- To have several international collaborations with institutes and universities of repute
- To register patents and intellectual property
- To establish a centre for high performance meta-analysis of microbes with favourable traits
- To publish a research journal on vegetative desiccation tolerance and fungal physiology
- To have separate building dedicated to high throughput microbiology and plant biology research and teaching programmes
- To start a business incubator facility which will exclusively market the IP generated through research