TIPS™

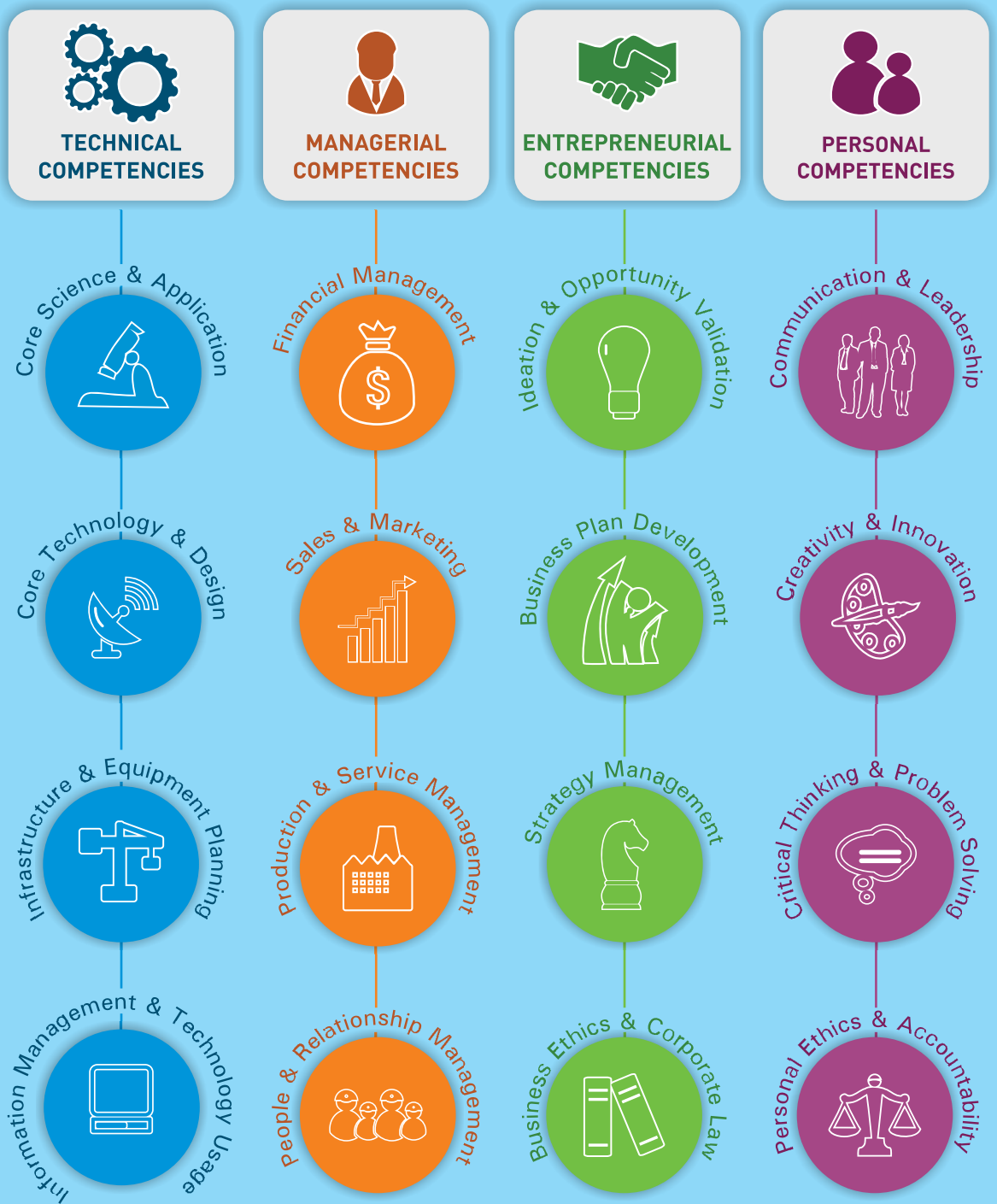
TIPS GLOBAL INSTITUTE

UNIQUE

2014 - 15

A 5-year Integrated (Undergrad + Grad) Degree Program in Technical Entrepreneurship

5 YEARS
MBA & MS



VISION

"To provide young individuals with competency based transformative higher education which enables them to be responsible business leaders"

ABOUT TIPSGLOBAL INSTITUTE

TIPSGLOBAL INSTITUTE, Coimbatore, a unit of **The Indian Public School** (TIPS), is established by a team of individuals who are well-educated, vastly experienced in industry & academia and have global exposure.

With a strong track record of running K-12 schools and global industry experience, we recognized the need for a higher education program that creates competent business leaders with both technical and business skills. Hence, we offer a unique 5-year Integrated (Undergrad + Grad) Degree Program in Technical Entrepreneurship that focuses on building competencies and facilitates the following dual degree:

- **M.B.A in Technical Entrepreneurship** from *Bharathiar University*
- **M.S in General Engineering** from *University of Pasadena, USA*

The above qualifications enable our graduates to gain global acceptance and recognition.

Spread over eight acres, our residential campus is designed in an environmental friendly atmosphere to provide adequate comforts and well equipped facilities that promotes a natural learning environment

Globally Recognized MBA and MS dual degrees in 5 years directly after Grade 12

COURTESY - THE HINDU (May 18, 2013)

THE HINDU

TODAY'S PAPER » NATIONAL » TAMIL NADU

COIMBATORE, May 18, 2013

'Leaders with entrepreneurial qualities needed'

Coporates do not look for mere managers. They look for leaders who have entrepreneurial qualities.

Having the mindset of an owner makes all the difference between a manager and entrepreneurial manager, said K.V. Rangaswami, advisor to the chairman of Larsen & Toubro, said here recently.

Graduation Day

He was delivering the graduation day address of Sri Venkateswara College of Computer Applications and Management, and Sri Venkateswara Institute of Information Technology and Management.

He said the entrepreneurial manager looked for opportunity in every adversity and avenues to grow the business.

He had very high business acumen who took responsibility for his activities and never ran away from challenges.

"Success through short cuts is short-lived. Sustainable success is what one should attempt at. The formula for definite success is to work hard. Hard work does not mean one should work without thinking. The young generation should think smart and work hard," Mr. Rangaswami said.

After a couple of challenging years, global green shoots were reappearing.

While the global economy was expected to grow moderately at 3.3 per cent in 2013, the Indian economy was expected to grow at 5.5 per cent in 2012-13 in spite of external uncertainty and internal inertia.

Commander (Retd.) K. Velu, chairman of Sri Venkateswara Group of Institutions, presided over the function.

COIMBATORE, May 18, 2013

TECHNICAL ENTREPRENEURSHIP

Technical entrepreneurship is the willingness and ability to organize, manage and grow a business venture, assuming its risks and applying domain specific technical knowledge with the objective of wealth creation. To perform successfully in this role, one needs a sound and flexible base in technology, excellent business acumen and managerial skills, an entrepreneurial drive and effective personal traits. To develop professionals who can thrive in this role, TIPSGLOBAL has designed a unique degree program that offers an unprecedented combination of the following:

"You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future."

- Steve Jobs, Apple

COURTESY - INDERSCIENCE PUBLISHERS (2004)

International Journal of Management and Enterprise Development

Vol 1, No. 1, Pages 77-88, 2004

"The role of technical institutions in developing a techno-entrepreneurial workforce for sustainable development of SMEs in India"

Developing countries such as India are in a state of transition. They are striving to be outward looking global economies rather than inward looking local economies, which will be possible only if small and medium-scale enterprises (SMEs) are encouraged. A wider population base capable of entrepreneurial behaviour needs to be developed. Entrepreneurs are the economic visionaries fuelling economic growth; they are the leaders who will pioneer new products and jobs and create new exports. Today, almost all students prefer wage-employment as a career option. This has been aggravated by our education system, which promotes wage-employment for students rather than self-employment. An engineer, through technical entrepreneurship, can bring a technical revolution that can meet the challenges of the emerging scenario of globalisation and liberalisation with key elements of competition rather than protection. Simultaneously, the increasing unemployment problems of engineering students have forced the Indian policy makers to explore new avenues in the small-scale sector and inculcate students towards self employment / entrepreneurship in their early careers. For the success of the entrepreneurship development programme, there should be more concentration on vision development of an individual entrepreneur than on a project. As shown in the survey conducted by the author to assess the entrepreneurial characteristics and capabilities of engineering students, the entrepreneurial characteristic is observed to be higher than that of their entrepreneurial capability. Indian industry has so far preferred international collaborations rather than academic or domestic R&D organisations in search of technology. It is essential for the industrial sector to develop indigenous technological capabilities in collaboration with the academic institutions. To develop and transfer technology for SMES in India, effective interaction of academic institutions with this sector will be the first step in this direction.

Vol 1, No. 1, Pages 77-88, 2004

BROAD AND SOUND BASE IN ENGINEERING & TECHNOLOGY

Broad and sound base in Engineering & Technology is achieved through a comprehensive and interdisciplinary curriculum in General Engineering that emphasizes real world problem solving. Providing a strong foundation in sciences and core engineering with a focus on applications, this prepares the student to become life long learners by instilling the desire and ability to seek the necessary technical knowledge in the field of business. Students have the option to specialize in a technical cluster of their choice through electives offered during later part of the program.

"If we teach today's students as we taught yesterday's, we rob them of tomorrow"

- John Dewey, American Philosopher and Educational Reformer

COURTESY - THE HINDU (April 15, 2013)

THE HINDU

TODAY'S PAPER » NATIONAL » TAMIL NADU

COIMBATORE, April 15, 2013

Analytical skills are at a premium

Too much specialisation is killing basic skills.

Can a cardiac surgeon be at a loss to treat a simple fever? Can a rocket engineer feel helpless when the fuse at his home goes kaput? Too much specialisation kills the basic skills and the talent in youngsters.

A committee headed by Sam Pitroda, Adviser to the Prime Minister on Public Information, Infrastructure and Innovation, has suggested the need for a broad-based education system in higher education, especially in engineering courses, as specialised programmes inhibit the ability of students to think about solutions to problems from multiple angles.

Modern education offers a heady combination of subjects unheard of by earlier generations: biology and genetics tapping computational power, mathematics being used in the field of genetics, biotechnology, electronics in medicine and biomedical engineering are among the mix.

Comprehending various aspects of a subject and conflating them to attain a goal requires ability.

Daily life throws up many permutations and combinations and the parameters are so complex that a problem needs to be analysed from different angles to reach a conclusion or solution.

The requirements have come full circle, from general education to specialisation and, further narrowing down the scope, super-specialisation; and now generalists are a rare lot. The change is most evident in the field of engineering, with modern super-specialty courses being the rage. What should one opt for?

Serious recruiters test the logical ability of a student first. What does this tell us? The requirement for any job is the ability to analyse, that is why corporates prioritise it before everything else.

From my interactions with engineering students, I can say that many have poor analytical skills. Whether an engineering college is the place to build the basic analytical skills is a big question, but it is relevant at that stage because that knowhow determines the future of the graduate.

The lack of analytical skills has lowered the employability of students from many colleges. If even after some 50 papers and many practical tests, logical ability remains poor, there is something wrong with the syllabus or method. Rote learning seems to be taking place even in engineering colleges.

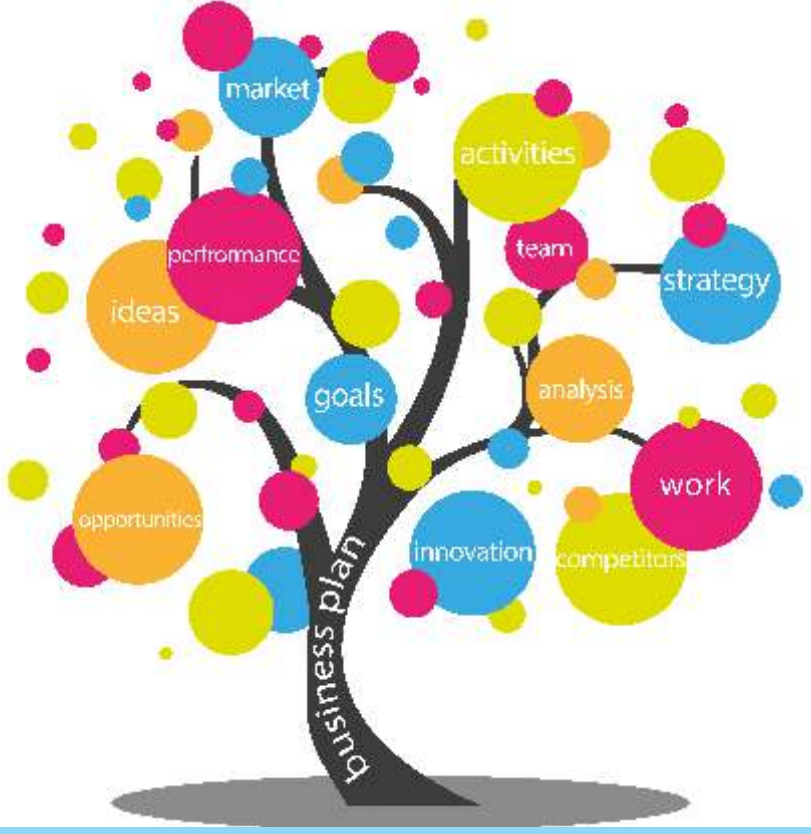
Another major trend is to place importance on improving the communication skills of engineering college students in the belief that it is the skill that needs to be enhanced for increasing employability. Without analytical skills, what is the point in it? Garnishing works only if the food is good.

Whether the syllabus or method is right or wrong is immaterial for engineering students.

What is required are analytical skills, and for that, aptitude training is essential. It is absolutely essential in the modern knowledge economy. At least, let the preparations begin with aptitude training. Better late than never.

Co-founder

Kengcyclopedia.com



BUSINESS ACUMEN AND MANAGERIAL SKILLS

Management skills are delivered through a well thought out curriculum, which is highly relevant to the current business environment and designed by a panel of experts in academia and industry. Students get practical exposure to the corporate world through multiple internships, field visits and guest lectures from industry experts, which are part of our industry partnership program.

"You must be the change you wish to see in the world"

– **Mahatma Gandhi**

COURTESY - The Economic Times (Jan 20, 2012)

THE ECONOMIC TIMES

Jan 20, 2012

Voicing concern over lack of employability skills among graduates, Minister of State for HRD and External Affairs E Ahamed today said that only 25 per cent of them are employable.

"Of late, employability of graduates coming out of our educational system is becoming a matter of great concern. I am told only 25 per cent of the general graduates across all streams have employable skills", he said, addressing students of B S AbdurRahman University on their "24th Graduation Day".

Noting that only 35-40 per cent of engineering graduates are readily employable, Ahamed said, "this is a matter of great concern and needs to be addressed with all seriousness".

COURTESY - The Times of India (Dec 10, 2012)

THE TIMES OF INDIA

Dec 10, 2012

World needs more entrepreneurs

Recession, global economic slowdown and now the Eurozone crisis have established an element of uncertainty in the air. A regular job is no longer the answer to one's career apprehensions, but the beginning. With pink slips and pay cuts becoming 21century realities, the world is in need of ideas, innovations, creative solutions and fresh perspectives that can cater to the changing market demands, emerging economies and a new world order.

So what is the solution? How can one create more jobs? How can it be ensured that the jobs are socially, economically and environmentally sustainable? Entrepreneurship is the answer, feel academics, industry leaders and global thinkers across the world. As TugrulAtamer, Vice-President, EMLYON Business School, France, points out, "In the next half century, with the world facing challenges and discontinuities, we will, more than ever, need entrepreneurs in all domains. Only entrepreneurs can turn these challenges into opportunities and bring about change that will take us into a more sustainable and equitable era by 2050."

ENTREPRENEURIAL DRIVE

Several key courses have been included as part of the curriculum to impart and enhance entrepreneurial skills. More importantly, these skills are nurtured through supporting programs in university-based innovation incubators, entrepreneur associations and business networks. An entrepreneurial sub-culture will be promoted in the campus where the young entrepreneurs can feed off of each other in a synergistic fashion and create their own dynamic environment.

"Education is not the learning of facts, but the training of the mind to think"

– **Albert Einstein, Theoretical Physicist**

COURTESY - THE HINDU (Oct 30, 2011)

THE HINDU

TODAY'S PAPER » NATIONAL » TAMIL NADU

COIMBATORE, Oct 30, 2011

'Young graduates fail to meet demands of the industry'

Despite the mushrooming of educational institutions and increasing number of graduates entering the job market, Indian companies were finding it difficult to spot out right candidates for jobs. Talent had become the key differentiator during recruitment, said S. Ramesh Kumar, President of Coimbatore Management Association (CMA) and Business head-SR, HDFC.

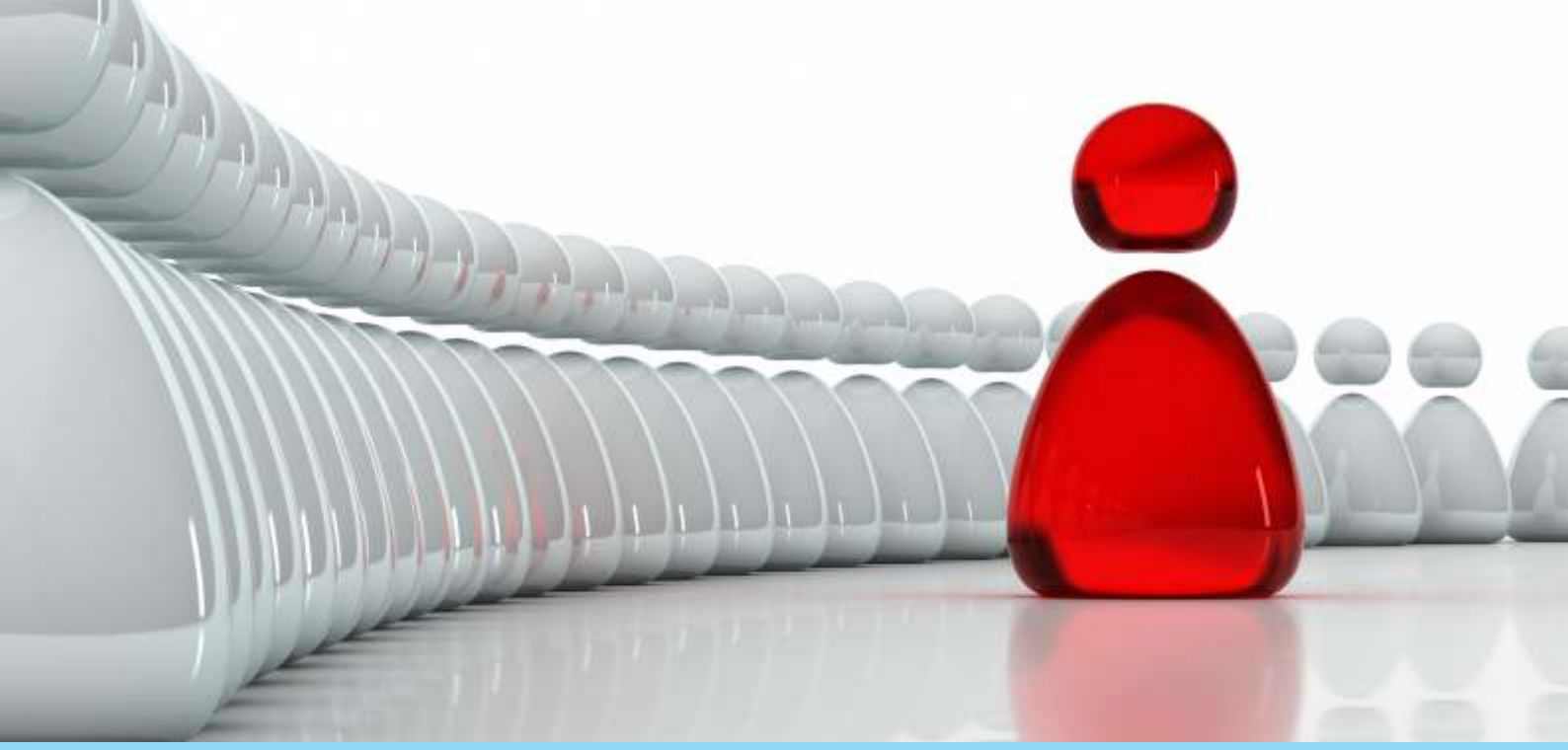
He was delivering the presidential address at an HR Meet on 'Talent Scarcity amongst Plenty' organised by CMA at Kumaraguru College of Technology here, on Saturday.

Citing recent surveys, Mr. Ramesh said that around 67 per cent of the employers complained that finding right employees to fill-in posts had become a tough task. India stands second in the list while the global average was only 34 per cent, he said.

Inadequacy in technical and hard skills and lack of knowledge and awareness about the field, were cited as main reasons for this. Factors like high expectations of job-seekers, lack of soft skills and talent and intelligence to fulfil responsibilities, though in smaller proportions, intensified the problem, Mr. Ramesh said.

Enhancing employability of students was no more a corporate social responsibility but a business issue that needed to be addressed immediately, said T. Muralidharan, Executive Chairman, TMI Group, Hyderabad. The mismatch between the skills of job-seekers and expectations of the industry was on the rise.

COIMBATORE, Oct 30, 2011



PERSONAL TRAITS

A conscious effort has been made to identify the important personal traits needed for an entrepreneur and several activities to develop each of these traits have been included in the curriculum from ground up. Through these activities that are facilitated by experts in the field, students get to practice and enhance these traits throughout their course of study at the TIPSGLOBAL Institute.

Students will also get an opportunity to intern in allied organizations where they will gain hands-on experience. An entire semester towards the later part of the program is allocated for this purpose.

"An entrepreneur tends to bite off a little more than he can chew hoping he'll quickly learn how to chew it."

– Roy Ash, Co-founder of Litton Industries

TECHNICAL ENTREPRENEUR

A graduating Technical Entrepreneur from TIPSGLOBAL will:

- understand the economics and financial aspects of an engineering effort;
- understand and be able to speak the language of other entrepreneurs, not necessarily just that of his or her own engineering or business domain;
- be able to understand, explain, persuade, and possess courage to take on calculated risks and responsibilities as a leader;
- be able to deal with uncertainty and ambiguity; be flexible; "mind someone else's business" in addition to his own;
- be able to be both a convincing "speaker" and an attentive "listener";
- be knowledgeable in foreign languages and cultures;
- be able to think on the global level and in global terms; exhibit interest in, and possess good knowledge of, foreign values, attitudes, and customs.
- possess effective lateral (functional) thinking and vertical (in-depth) thinking, as well as a team player's attitude;

On successful completion of the program, our graduates will be able to launch and grow their own businesses or secure corporate roles that require entrepreneurial skills where they are positioned for rapid growth. The graduates will be able to leverage the connections established through the industry partnership program to secure the above-mentioned roles.

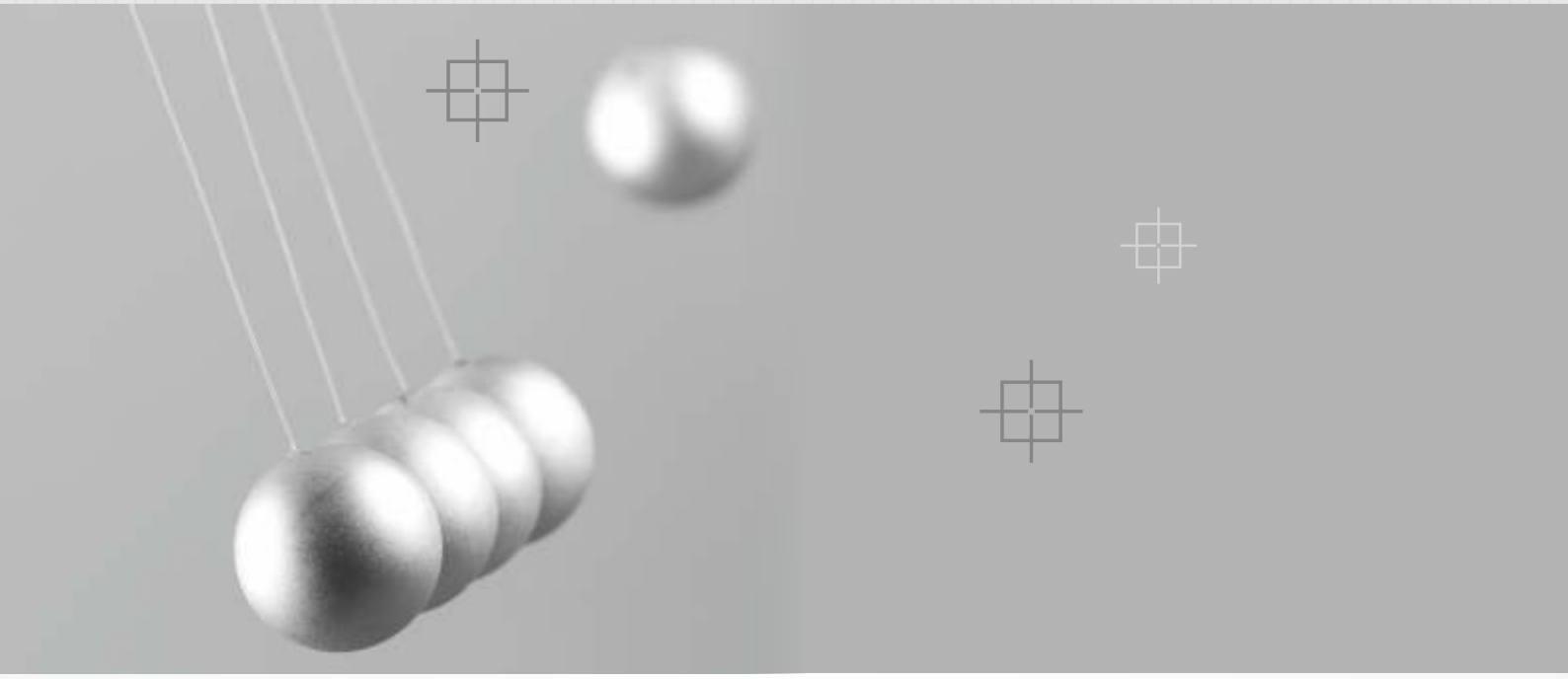
OUR PROGRAM DELIVERY

Our program is designed to impart the following competencies:

- Ability to apply knowledge
- Ability to understand the context of work
- Real world exposure and industry connect
- People skills
- Leadership
- Logical and analytical reasoning
- Creativity and Innovation

In order to successfully impart the above competencies, we have introduced a Competency Based Education System (CBES). We believe that competency, generally referred to as the ability to use the combination of knowledge, skills and personal characteristics or traits, determines the capability of how well an individual could perform in a role.

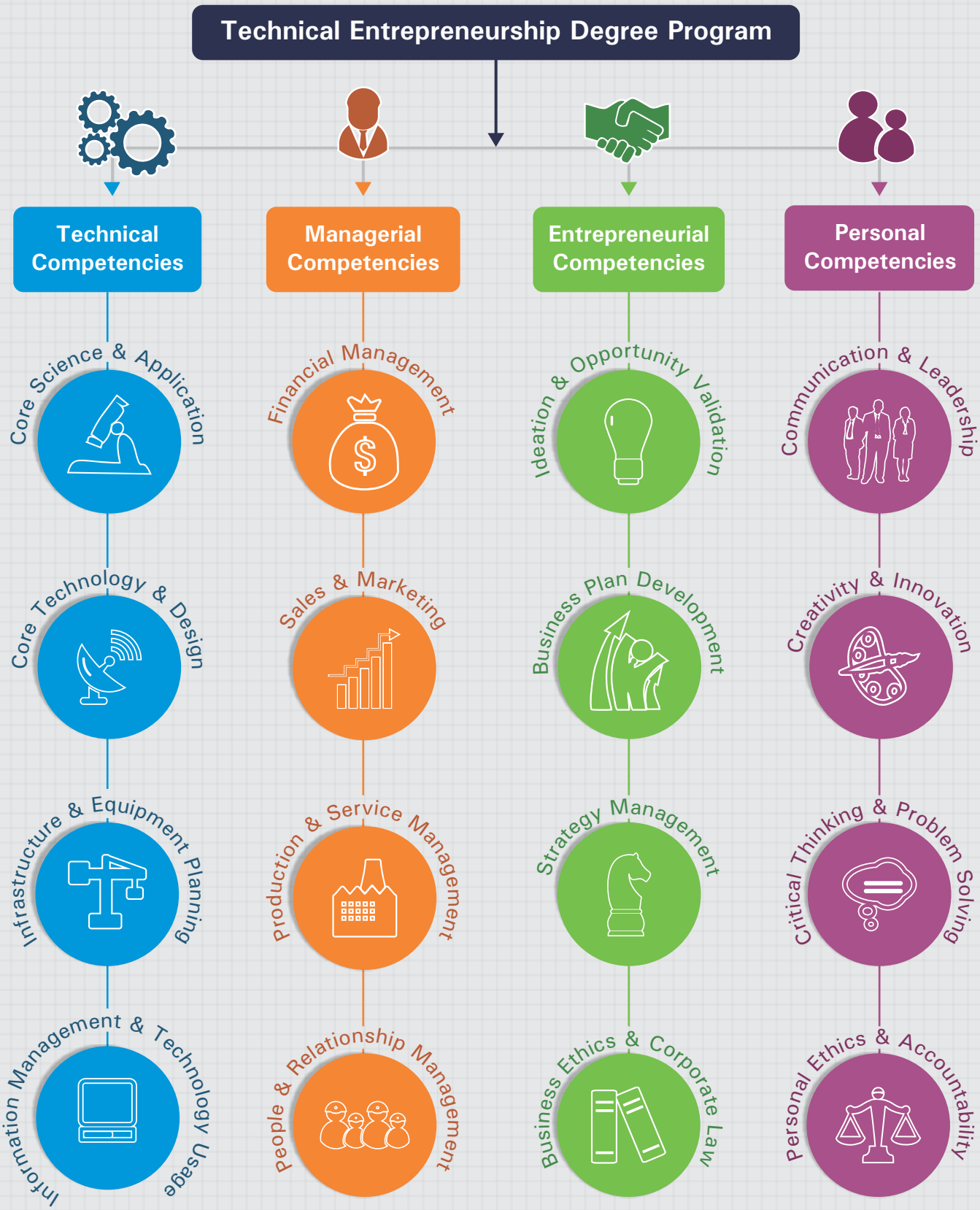
Our program delivery is designed to include various practical and industry relevant activities, case studies, research, industry visits, experiential learning sessions, expert knowledge sharing sessions by various industry experts and academicians from around the world in addition to multimodal classroom sessions.



CBES FOCUSES ON

CBES focuses on

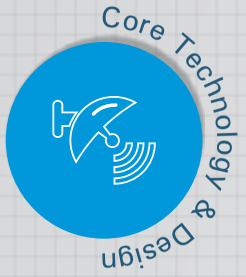
- Learning outcomes
- What the learners are expected to do rather than on what they are expected to learn about
- Functional approach to education that emphasizes life competencies and evaluates mastery of those competencies
- Providing a holistic approach to college education that allows learning to happen in a variety of settings
- Learning through project-based approaches and outside of classroom setting rather than students being tied to a course alone
- Helping students acquire knowledge through active construction
- Encouraging students to engage in active inquiry and make explicit and tacit assumptions
- People skills and leadership qualities

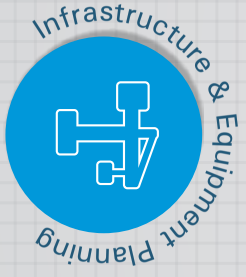

Technical Entrepreneurship Degree Program
Technical Competencies
Core Science & Application
Core Technology & Design
Infrastructure & Equipment Planning
Information Management & Technology Usage
Managerial Competencies
Financial Management
Sales & Marketing
Production & Service Management
People & Relationship Management
Entrepreneurial Competencies
Ideation & Opportunity Validation
Business Plan Development
Strategy Management
Business Ethics & Corporate Law
Personal Competencies
Communication & Leadership
Creativity & Innovation
Critical Thinking & Problem Solving
Personal Ethics & Accountability

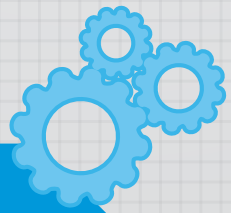
PROGRAM DESCRIPTION

The Technical Entrepreneurship program at TIPSGLOBAL is designed to impart four major groups of competencies – technical, managerial, entrepreneurial and personal. These competencies are delivered through a rich curriculum that consists of outcome based courses and activities. The following sections provide a short description of the courses for all competencies along with student learning outcomes, example activities and potential contributors.

The attached handouts illustrate the journey of a student through the TIPSGLOBAL Technical Entrepreneurship program and a consolidated view of the competencies delivered.







TECHNICAL COMPETENCIES

MATH 112
Probability & Statistics

The course will cover fundamentals of probability and statistics. Students will get skilled at acquiring, organizing, presenting and processing data to make meaningful inferences that will help in the decision making process. Students will be exposed to rules of probability, conditional probability and probability distributions. Various estimation techniques and determining the confidence of such estimations will be covered. Students will learn to evaluate the relationships between multiple business-variables based on data. This course will expose the students to the application of statistics in a variety of areas including Marketing, Economics, Finance, Insurance, Operations, Human Resources Management and Information systems.

Student Learning Outcomes

On successful completion of the course, students will be able to :

- Collect and describe discrete data graphically, compute measures of centrality and dispersion and use these values in making managerial decisions
- Compute probabilities of events by modeling sample spaces and applying rules of permutations and combinations, additive and multiplicative laws and conditional probability
- Evaluate expected values of variables that can take varying values with different probabilities and use that to estimate key business parameters like return on investment
- Choose the appropriate sampling technique to arrive at the sample that is representative of the population. True sampling is critical to accurate analysis of the population
- Analyze data recorded over time, fit it to a suitable curve and project the curve to forecast a value of the variable

Activities

- Probability as a long-term average: Use of computer simulations to establish that Probability is really a long-term average rather than the outcome of the next iteration
- Home Field Advantage in IPL: Use IPL data from all games played so far and determine if playing at home and winning are related
- Warranty Period For TVs: With the given data that describes the life of TVs from a manufacturer, find the appropriate warranty period

Contributors

- Statisticians
- Marketing Executives
- Insurance Processors
- Meteorologists

MATH 121
Applied Mathematics-I

The course will cover fundamentals of analytical geometry, college-level algebra, elements of trigonometry and elementary calculus. An intuitive introduction to the principal ideas of differential and integral calculus will be covered. Topics include limits, continuity, derivatives, and integrals with applications. As part of this course, students will learn to translate verbal problems into mathematical models and apply appropriate calculus techniques to optimize functions developed in mathematical models. Emphasis will be placed upon the use of calculus in solving problems from various areas including business, economics and natural sciences. Students will be assessed not only on the concepts but also on their ability to successfully apply them.

Student Learning Outcomes

On successful completion of the course, students will be able to:

- Apply algebraic concepts in business problems such as calculating monthly payments and interest rates and performing break-even analysis
- Recognize differentiation as a way to calculate instantaneous rate of change and apply those methods to calculate speeds of objects and rate of fluid flow at specific instants
- Utilize differentiation techniques to determine incremental changes to cost and revenue of an organization
- Demonstrate proficiency in applying optimization techniques to quantities that need to be maximized or minimized like amount of raw material used to fabricate specific shapes or profit margin in a business
- Apply the fundamental theorem of calculus in calculating areas of irregular shapes, centroid of an area and moments of inertia of rotating bodies
- Identify problems in business, technology, social and life sciences where calculus techniques can be applied

Activities

- Roller Coaster Design
- Real-world Optimization Problem Identification and Solution
- Case Study: The Design of the Coke Can

Contributors

- Bank Managers
- Loan Officers
- Building Architects
- Air Traffic Controllers
- Space Flight Engineers

PHYS 123
Basic Sciences-I

This course is a foundation and a pre-requisite course for other engineering courses that are taught in later semesters. Many college level physical concepts are introduced starting from basic measurements of time, length and mass and then moving on to explaining motion in 2-D and 3-D, velocity, acceleration, work, power, energy and momentum. Several fundamental physical principles and laws are explained. Concepts related to temperature and pressure is then introduced followed by basics of electricity, magnetism, electromagnetism, sound and optics.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Acquire skills that are useful for other disciplines and which they can use throughout their lives. These include thinking logically and analytically; solving problems and making simplified assumptions and constructing mathematical models
- Understand operation of many devices in various disciplines that are used in the current technological world. Few examples include laser printer, speed sensors, noise cancellation headphones, induction stove, ultrasonic imaging, CT scanner etc.
- Develop a sense of beauty and appreciate the fundamental laws that governs the universe

Activities

- Students will be asked to demonstrate and present a device of their choice to the class either individually or as a group covering the fundamental physical concepts of the device

Contributors

- Space Research Engineers
- Air Traffic Controllers

CHEM 213
Basic Sciences – II

This course gives a foundation of Chemistry, which is concerned, with the study of "Matter" - its composition, structure and properties and with the change of one form to the other. The course is offered by giving examples of numerous activities that we do in our daily lives and then going on to explain how Chemistry is at work in these activities. In this learning process, five sub-divisions – analytical, bio, organic, inorganic and physical chemistries are covered.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Comprehend and explain how chemistry plays an important role – in industries such as food, drugs, forensics, environment, agriculture, energy, cosmetics, geology etc.
- Explain the chemistry behind several examples such as plastics, soaps, polymers, radioactivity, fuel cells, ozone and its impact, enzymes, isotopes, cotton, cement, batteries etc.
- Acquire skills that are useful for other disciplines and which they can use throughout their lives. These include thinking logically and analytically; solving problems and making simplified assumptions and constructing mathematical models

Activities

- Pick several examples (a minimum of 5, one for each sub-division mentioned above) that we use everyday (ex. mouthwash, paste, gasoline, carbohydrates, alcohol etc.) and prepare a report explaining in detail how Chemistry is at work
- Demonstrate in front of the class, a chemistry experiment of choice along with objectives, predictions, methodology and results

Contributors

- Environmental Chemist
- Officials from Pollution Control Board

MATH 214
Operations Research

Operations Research (OR) is the discipline of applying advanced analytical methods to help make better decisions. It uses mathematical modeling, statistics, analysis, and optimization in a holistic approach to improving our knowledge of systems and designing useful, efficient systems. It provides the tools and theories to solve real-world problems by finding the optimal solutions to the models subject to constraints of time, labor, resource, material, and business rules. With Operations Research, people make intelligent decisions to develop and manage their processes and businesses.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Utilize the techniques of linear programming in finding optimal solutions under the given constraints that can lead to informed decision making
- Apply Operation Research Techniques in solving scheduling problems
- Formulate the models from real business situations and use optimization techniques to solve problems like resource allocation and Inventory Control
- Demonstrate proficiency with tools for optimization, probability, statistics, simulation, and engineering economic analysis, in contexts involving uncertainty and scarcity of expensive resources
- Choose the appropriate mathematical software to solve proposed models
- Conduct sensitivity analysis with parametric changes in the cost coefficients or resources availabilities
- Develop a report that describes the model, solution, analysis of the results and propose recommendations based on results

Activities

- Airline Crew Assignment Project: Once flight schedules have been fixed, there are typically an astronomical number of ways in which the flight crews for given airlines could be allocated to cover the flight commitments. Choose the least expensive option among the possible crew assignments.

Contributors

- Statisticians
- Marketing Executives
- Insurance Processors
- Meteorologists

MATH 215
Applied Mathematics-II

This course focuses on technical skills necessary for students to become proficient in applying fundamental concepts and tools of Calculus. Application of Partial Derivate, Multiple Integrals, Differential equations and series solutions are covered in this course. The primary goal of this course is the effective use of the knowledge acquired to identify, represent and solve a wide variety of day-to-day and industrial problems. In order to facilitate the learning process, as part of the project work in this course, students will be encouraged to come up with real problems where such concepts can be applied, and use tools available to seek solutions for complex problems.

Student Learning Outcomes

On successful completion of the course, students will be able to:

- Use three dimensional coordinate systems to represent lines, planes and surfaces
- Utilize multiple integrals in various coordinate systems to calculate surface areas and volumes of three dimensional shapes
- Use differential equations to analyze spring/mass systems, objects under acceleration and electric circuits
- Develop awareness to tools available that can solve complex differentiations and integrations

Activities

- Verify Newton's law of cooling: Formulate and solve the problem using differential equations and verify the results in the lab.
- Students will need to identify a real world problem that requires the use of double integration. They will be required to formulate the problem, make reasonable assumptions for any data they need, solve the problemand submit a report that will include the problem statement, assumptions, mathematical concepts used, tools used and the solution.

Contributors

- Electrical Engineers
- Physicists
- Economists
- Aeronautical Engineers

MECH 113
Engineering Drawing

Engineering drawing is the language of communication between engineering professionals involved in design and production. It is highly important for engineering professionals to be capable of producing engineering drawings at a professional level and be capable of reading and interpreting drawings and engineering documentation produced by other professionals. Therefore, it is the intent of this course to equip students with the fundamentals of this unique language and to give them the skills necessary to prepare complete, concise, and accurate communications through engineering drawings.

Student Learning Outcomes

On successful completion of the course, students will be able to:

- Convert sketches to Engineering Drawings using appropriate rules and conventions
- Read and interpret blue prints for manufacturing, orthographic projections, isometric drawing and section views
- Develop an understanding of 2D and 3D computer aided drafting with the requirements of good engineering drawings and be able to apply them to their work
- Proficiently use AutoCAD, a CAD software package used for producing engineering drawings

Activities

- Visit to an iron castings manufacturing facility to see how isometric views are used to specify casting requirements
- Create orthographic projections – Elevations, floor plans and sectional views for a building as per specifications

Contributors

- Building Architects
- Industrial Component Designers
- Automobile Designers

MECH 221
Engineering Materials

This course lays the foundation for understanding the mechanical and physical behavior of materials – metals, ceramics, polymer and composite materials. It introduces the major family of materials that make up each material class, outlines the microstructural features of each class and then show how to process or treat these materials to get the structures and properties we want. Protection mechanisms against deterioration and failure of materials are also discussed. In the end, exotic materials and processing technologies that are developed are also introduced.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Identify and design materials for specific requirements – for any electrical, structural, chemical, automotive, aerospace applications
- Have knowledge of modifying the processing techniques of materials (for ex. quenching, tempering) to get specific mechanical properties
- Know factors that deteriorate material properties (such as corrosion) and ways to protect

Activities

- Select an engineering application of choice and identify the material required for that application, layout the processing methods and list out the reasoning behind the choice of the material
- Presentations by a Scientist on a materials research topic this is currently being pursued
- Field visit to any of one material processing factories such as a steel foundry or a forging unit

Contributors

- Process Engineers
- Material Scientists from prominent industry/academia

ELEC 222
Electronics Materials, Devices and Fabrication

This course gives an introduction to basic physical properties of solid materials. While some solid-state physics concepts are introduced, emphasis is on Engineering applications based on semiconductors, dielectrics, magnetic and optical materials. Operation of various electronic devices starting from basic diodes, transistors, amplifiers, LEDs and solar cells are covered. Next, the various steps involved in fabricating these electronic devices in the modern microelectronic industry are discussed.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Clearly explain the behavior of various classes of electronic materials and the reasoning behind those behaviors in a fundamental way
- Identify appropriate materials for various electrical and electronic applications based on the material properties
- Explain the operation of various electronic devices that are used in electronic circuits
- Explain the processes involved in fabrication of electronic devices involved in a microelectronic industry

Activities

- Project Study to identify a modern day electronic product (such as an optical fiber, LCD, solar cell etc.) and explain the operation of the device from basic physical concepts
- Field visit to a manufacturing plant where electronic devices are used as an integral part of the manufacturing line
- Guest Lectures from executives of an electronic firm to discuss status and challenges of this industry in an Indian context

Contributors

- CEO & Production Managers from a prominent electronic industry

MECH 312
Thermal and Fluid Sciences

This integrated course covers the fundamental principles of thermodynamics, fluid mechanics and heat transfer as applied to engineering practice that a technical entrepreneur would need. Students are exposed to the language and application of these sciences to engineering systems, particularly energy conversion devices such as power plants, refrigerators and engines. Emphasis is placed on the conservation laws (Mass, Momentum and Energy), properties of materials/substances and applications of the first and second laws of thermodynamics. The overall goal is to teach the students how to recognize categories of thermal-fluid problems and use engineering principles to approach and solve problems.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Explain the terminology and principles of thermodynamics, fluid mechanics and heat transfer and the role they play in heat moving equipment like refrigerators and air-conditioners
- Understand the process of conversion of thermal energy to mechanical work, commonly called as heat engines and their applications in automobiles, aircraft propulsion and power conversion
- Identify, formulate and solve problems involving external and internal convection heat transfer for various surface geometries
- Apply the laws of thermodynamics in calculating efficiencies of heating and cooling equipment
- Evaluate forces and pressures for static fluid problems, and understand the significance of pressure vessel design in applications such as reactors, petrochemical plants and storage of liquefied gases like LPG, Propane and Ammonia
- Analyze the fluid velocity profile and pressure drop for laminar and turbulent internal pipe flow and apply this in design of water treatment plants and air-flow systems
- Calculate drag and lift forces created by air/fluid flow around an object and understand their application in industries such as aviation

Activities

- Calculating the efficiency of a specific air conditioning system using published specifications
- Design of a hydro-electric power plant based on specifications provided
- Field visits to power/chemical plants, petroleum refineries, natural gas processing plants

Contributors

- Process Engineers
- Thermal/Hydro Power Plant Engineers

ELEC 322
Circuits and Digital Design

This course starts by refreshing the operating concepts of basic electronic devices introduced in ELEC 222 and moves on to introducing amplifiers (used in common radios, numerous medical applications etc.), oscillators (used in radio transmitters, quartz clocks etc.) and switching circuits, which forms the basis for digital design.

Various elements in a digital design such as logic gates, flip-flops, counters, registers and arithmetic circuits are taught. This is followed by introduction to logic design concepts, timing circuits, memory devices and microprocessors, which form the basis for ELEC 411. Lastly, some fundamentals on device modeling, CAD design, testing, yield and economics along with modern day design methodologies and tools are covered.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Design circuits for simple electronic applications
- Interpret and analyze the behavior of complex circuits used in day to day applications
- Understand the operation of various design elements which are the building blocks for modern day computers and mobile devices
- Have a fundamental knowledge on how complex digital circuitries are designed and tested

Activities

- Identify a simple electronic device and explain the operation using basic elements and block diagrams
- Project work on history and evolution of electronics industry dating back to several decades and research on industry's roadmap to the future

Contributors

- Memory and/or Logic Designers from a well reputed electronics industry

ELEC 411
Computer Architecture and Interfaces

This course will start with explaining the organization of a computer and explain all the components involved. It then moves on to bridging the gap between the high-level programming languages (e.g. C, Java) and the low-level electronic components (e.g. transistors, gates). The course then discusses the details of designing a processor: i) a simple processor design ii) pipelining iii) memory organization and iv) multi-core processors. Several fundamental techniques, like pipelining, caching, and parallel execution are introduced in standalone and embedded applications. This course takes the MIPS architecture as a vehicle to explain the complexities and trade-offs in computer architecture.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Develop an understanding of what the significant modules and components in modern computers are such as CPU, hard drives, displays, memory and how are they interconnected
- Understand the aspects of interfaces between software (such as C or Java) and hardware
- Understand techniques used by hardware designers (such as parallel processing/multi-core processing) to improve overall system performance
- Design a basic CPU that supports a given set of instructions and also engineering methods for improving its performance

Activities

- Dissect a computer (in the process – dismantle and assemble) and prepare a report identifying each component, listing the merits, specifications and interfaces of each of the component
- A project using a lab kit and a PC that gives hands-on experience in hardware based activities such as digital logic and microprocessor programming

Contributors

- Systems Architect/Designer, Logic and Memory designers from reputed design companies

ELEC 412
Communication and Control Systems

The first part of this course deals with Communication Systems. Basics of wireless communication technology such as frequencies used for communication, signal characteristics, antennas and different multiplexing and modulation schemes are introduced to help understand many design decisions in higher layers of mobile communication systems. Different wireless communication systems such as GSM, satellite communications, digital broadcast systems and wireless LAN are introduced. The second part of the course deals with the fundamentals of Control Systems. Different components of a control system, classifications including open loop and closed loop systems and mathematical representation of a physical system are covered. Time response of a system to an input signal, stability and frequency responses are then explained along with the basics of PID controllers. At the end, an introduction to digital control systems is given.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Explain how cellular devices work and understand different technologies used in cellular communications such as GSM, CDMA, TDMA etc. and their pros and cons
- Understand what a computer network is and explain various protocols such as TCP/IP, HTTP, FTP
- Explain how local area networks (LAN), wide area networks (WAN) and wireless networks function
- Understand how the controls function in systems such as refrigerators, furnaces, variable speed drives, heat exchangers, robots etc.
- Describe the principles and characteristics of controllers used in motion and process control systems
- Understand terms such as stability, bandwidth and time response in a control system used in common applications

Activities

- Prepare a project on wireless communication frequency regulations in different countries and list out the regulations applicable for India
- Take an industrial system currently in practice, represent in a block diagram format and analyze after identifying each component, inputs, outputs and noise

Contributors

- Technical expert from a Mobile Operator
- Process Control Engineer from a manufacturing firm

MECH 417
Engineering Mechanics

Building on the applied math and science courses, this course exposes students to studying and modeling the forces that affect bodies at rest and in motion. Students will find mechanics to be of vital importance to any field they choose to pursue. They will learn to determine and analyze forces applied to a body, the behavior when bodies collide and the movement of an object when different forces are applied to it. This course will introduce students to the core concepts of mechanics and will enable them to apply these concepts as they strive to design, test, and manufacture safe and reliable products. Students also learn to analyze problems in a systematic and logical manner and drawing free-body diagrams.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Identify and use units, notations, and vectors common in mechanics; convert between unit systems
- Identify, explain, and perform calculations using the concepts of forces, couples, and moments
- Formulate free body diagrams to analyze forces on components of complex mechanical systems like bridges and elevators
- Perform calculations involving friction including calculations concerning belts and pulleys
- Compute stresses and strain in simple, composite, and curved beams; identify materials and loading configurations for such beams
- Apply the concept of equilibrium to systems, which can be modeled as particles in 2D and to rigid bodies in 2D
- Calculate resultant forces and predict the effects of collision between objects that are in motion

Activities

- Students will revisit the coke can design case study covered in Applied Mathematics-I. They will analyze the influence of mechanical forces the coke can would be subject to and utilize that information to enhance the model to perform a more realistic design.

Contributors

- Material Scientists
- Design Engineers

ELEC 211
Electrical Circuit Theory and Technology

This course will start by introducing various fundamental terms associated with electrical circuits such as Charge, Current, Voltage, Power and Energy etc. Basic concepts, laws, theorems, methods of analysis and applications of an electric circuit are then covered. Elements of an electric circuit such as resistors, capacitors and inductors are introduced followed by study and analysis of DC and single and three-phase AC circuits. The interaction between electricity and magnetism is studied which leads the way to understanding the operation and application of electric motors, generators and transformers.

From an industrial viewpoint, practical wiring diagrams, electrical safety, grounding techniques, electrical instrumentation and lighting will also be taught.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Understand and analyze electric circuits with the functionalities of individual electrical elements
- Design and analyze DC and AC circuits for simple applications
- Design motor, generator and transformer specifications after studying load details

Activities

- Field visit to a electrical machinery (induction motor for example) assembly line
- Field visit to a manufacturing facility to see and understand how various electrical machineries come together in operation
- Guest lecture from a prominent electrical contractor to highlight various factors to consider in setting up an industrial circuit

Contributors

- Electrical Contractors
- CEs and SEs from EB
- Plant Maintenance Managers

ELEC 311
Power Systems and Power Electronics

The first part of this course covers Electric Power Systems components – generators, transformers, transmission lines, substations, distribution lines and distribution transformers. The second part discusses Power Electronics, which is the technology associated with efficient conversion of electrical energy from one form to the other. AC/DC, DC/AC, DC/DC converters which are widely used in several applications such as mobile phones, computers and televisions are discussed. The study will also include the basic operation of power semiconductor devices. In addition to the above, various renewable energy technologies will also be covered which is becoming increasingly important as global power needs continue to escalate.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Understand, appreciate and explain the various components of power - the most important resource for any business
- Comprehend the operation of various power conversion devices in low power and high power applications
- Appreciate and understand the need for renewable energy technologies and their operations, pros and cons
- Understand an electrical diagram created for a residence/industry

Activities

- Field visits to conventional (thermal or hydro) power generation facility and local sub-stations with trip reports
- Field visits to a renewable power generation facility and trip reports
- Guest lectures from EB professionals to discuss the past, present and future of power generation and distribution in the state

Contributors

- Supervisors of a Power Utility company
- SEs and CEs from EB
- CEOs from Renewable Energy Companies

CIVL 313
Construction Engineering

This course is designed to provide students with a broad and conceptual foundation in civil engineering. The coverage includes measurements of distances, surveying, angles and leveling, and illustrative examples of land area calculation and land map development. Students are exposed to various building components and structures and requirements and significance of each of these components. They also learn about the various materials used in construction along with estimating the quantities of the required materials. This provides an exposure to building cost estimations as well. In addition to all this, the basics of interior design and landscaping are covered.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Choose the appropriate method to survey land
- Use measurements of distances, angles and levels to perform land area calculations
- Generate land maps which are an important prerequisite for constructions such as buildings, roads and bridges
- Choose the appropriate materials for constructions
- Decide on the construction materials to be used for various building components and structures
- Develop awareness to various aspects of building constructions including flooring, roofing, plastering and landscaping
- Estimate quantities of various materials required for construction
- Estimate costs for constructions

Activities

- A hands-on technology based project on Land Survey: With assistance from a local civil engineering firm, students will record length and angle measurements of an assigned area and calculate unknown measures using math concepts. A topographical map will then be plotted using AutoCAD and presented to the class
- Visits to construction sites to observe laying foundations and various stages of construction

Contributors

- Land Surveyors
- Building Architects
- Civil Contractors

CIVL 321
Introduction to Structural Design

This class aims at providing students with a solid background on principles of structural engineering design. The course begins with coverage of the fundamental structural components used in design including columns, trusses and beams. Students will be exposed to the theories and concepts of both concrete and steel design and analysis both at the element and system levels. Students will learn to use load calculations and safety aspects in validating designs. Hands-on design experience and skills will be gained and learned through problem sets and design projects.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Describe the various structural elements used in design
- Choose appropriate structural elements like columns, beams and trusses
- Calculate load on the components of civil structures like buildings and bridges
- Validate civil structural designs by performing load calculations
- Understand the role of the foundation in providing stability to civil structures
- Calculate the bearing capacity of foundations

Activities

- Visits to live construction sites where students analyze documents of live construction projects and spend time with engineers and architects
- Evaluating the minimum bearing capacity for the foundation needed to support the building specified and make recommendations on the kind of foundation that will be needed

Contributors

- Structural Design Consultants
- Building Architects

COMP 122
Introduction to Information Technology

This course helps students understand the basic necessities in IT for an entrepreneur. Some of the key topics in the course are introduction to computers and peripherals, fundamentals of networking, internet and how it works, how ERP can help to automate process and increase efficiency in a business environment, introduction to ecommerce and how it is used in various industries, importance of security and the impact of not protecting against virus attacks, fundamentals of Database Management Systems and emerging technologies.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Choose their own Hardware and software for their need
- Automate their work place with network, internet and software applications
- Select an appropriate ERP for their business
- Comfortably perform e-Commerce transactions
- Assess the data storage needs of their business and be able to evaluate an appropriate DBMS system for their business
- Adopt more efficient technologies like cloud computing and virtualization in their enterprise

Activities

- Secure IT infrastructure plan for a 200 employee company
- Compare ERP solutions
- Students will be taken to a corporate facility to help them understand how IT infrastructure is done there

Contributors

- Chief Information Officers
- Business Analysts
- IT Managers

COMP 314
Software Development Cycle and Project Management

This course outlines all the processes that are involved in a software development life cycle and various models that are being followed in the industry. It also helps students understand the key aspects of project management and how to manage a project effectively. Key topics such as SDLC, requirements gathering, design, development, implementation, quality assurance processes and how to manage software projects are covered in the course. Additionally students will learn about current tools and technologies, latest trends related to the above.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Understand customer needs and capture their requirements to be able to build a software application
- Deliver a reliable software application with the help of a team of technical resources and implement it successfully
- Recommend or choose an appropriate SDLC model based on organizational needs
- Manage a full software project from requirements gathering to implementation with very little help or guidance
- Demonstrate necessary knowledge and skills that are required to start their own software firm and execute projects successfully

Activities

- Requirements gathering, level of effort estimation and project plan
- Strategic plan including backup, redundancy and disaster recovery management methods to guarantee 99.9% uptime of an Enterprise class application
- Guest lecture from an industry expert on project management and its challenges in the industry
- Guest lecture by a project manager from an industry to discuss software development cycles and challenges faced

Contributors

- Software Architects
- Software Development Managers
- Senior IT Project Managers

COMP 323
Software Construction and Engineering

This course is a comprehensive introduction to the practice of software design and development. The course is designed in a way for students to learn software development by developing software. Students will form groups and work together to develop a significant software application. Students will be introduced to all aspects of software development, including requirements analysis, design, implementation, validation, deployment, documentation, and maintenance. However, students will spend most of their time reading, writing and revising code as a core activity using C++ or C#.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Convert business software requirements into technical specifications
- Design and implement a complete software solution or application
- Gain expertise in a programming language of their choice and be able to write code efficiently
- Create design specifications and maintenance documents

Activities

- Group of students will develop significant software applications. The project will be organized like a commercial software development project, with weekly milestones. Every student is expected to contribute on a weekly basis. Students should expect to spend at least 8 hours a week outside class working on the project. Every student must present his or her code or design at least once during the semester
- A guest lecture to talk about latest software design patterns and methodologies
- A guest lecture to talk about good coding practices and how software is built commercially in big companies

Contributors

- VP, Software Development
- Application Development Mangers
- Software Architects

COMP 325
Business Processes and Information Systems

This course will help students learn about what a business process is and why it is essential for an organization and the need for improving it. This course also addresses the methods and techniques required to analyze, design, implement, automate and evaluate business process. Students will learn how to use Supply Chain Management Systems (SCM) and Customer Relationship Management Systems (CRM) in an organization.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Describe and analyze Business Processes in organizations
- Identify weaknesses in a given process design and suggest improvements that will benefit organizational performance
- Redesign a given process using improvement patterns and outside best practices
- Develop an implementation and integration strategy for processes that leverages organizational and technical capabilities of an organization
- Identify appropriate Supply Chain Management (SCM) for their organization to improve the efficiency
- Identify and implement CRM systems

Activities

- Implement or enhance a business process using a Business Process Management system
- Evaluate an enterprise CRM and submit a report on it's advantages and disadvantages
- Evaluate a CRM system and submit a report on the benefits of using it in a corporate environment

Contributors

- Project Managers
- Professional Service Managers

COMP 413
Business Analytics and Intelligence

This course helps students understand what Business Analytics (BA) is and how the data gathered would help them study the past and current business performance and gain insight into what future performance would be. Students will also learn about various tools and software used in BA and how to use them. Only when there is data gathered and organized in a certain way a good analytics can be achieved and that is where Data Warehouse and Business Intelligence (BI) help in a big way. Students will learn about how to organize data using Data Warehousing and various tools and software used in creating them and identifying various dimensions on how to interpret data using BI techniques. Apart from this, students will learn about the fundamentals of Data Mining and various data mining methods and how it can help in a business context.

Student Learning Outcomes

On successful completion of this course, students will be able to:

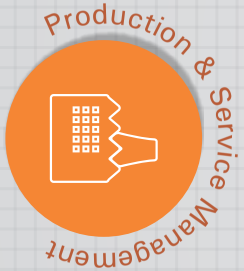
- Study the past and current data from a data warehouse and gain insight into what future performance would be using various Business Analytics techniques, tools and software
- Help in setting up BI techniques for a corporate environment
- Analyze real time data using BI tools and use the results to make informed decisions
- Understand the impacts of operational metrics on a business and determine the root causes
- Utilize knowledge of data management and SQL, to develop a data warehouse
- Develop proficiency in tools available for BA and BI
- Understand data mining and utilize it to detect sudden change in business patterns that might indicate change in market conditions, change in customer behavior or fraudulent activity

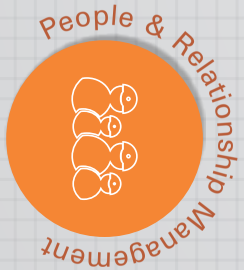
Activities

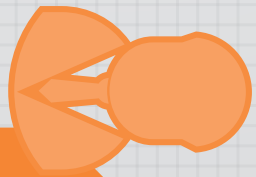
- Given the data of a real world company, students would be able to use the appropriate tools to come up with what the future performance would be
- Given a data warehouse information, students will be asked to identify key business intelligence gathering dimensions that could help in analyzing it

Contributors

- Business Analysts
- BI product companies







MANAGERIAL COMPETENCIES

FINA 224
Financial Reporting and Analysis

The course provides a foundation on accounting policies and principles and develops students' understanding of financial reporting. It covers the articulation of financial elements from which financial statements are constructed. The emphasis is on analysis and interpretation of different kinds of financial statements using relevant financial analytical tools and utilizing such information in making sound financial and economic decisions.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Become aware of the accounting concepts and the formats used in financial statements such as the balance sheet, the income statement and the cash flow statement, and the financial reporting practices of different forms of organizations
- Prepare and interpret cash flow statements and develop a clear understanding of cash flow from various sources such as operations, investment and financing activities
- Analyze financial statements using standard financial ratios such as liquidity, profitability, turnover and market value
- Applying projection techniques to forecast a firm's short-term and long-term financial needs
- Analyze a firm's performance by reviewing annual reports to determine its strengths and weaknesses and be able to use financial analysis to improve performance

Activities

- Students are introduced to real life case analysis at appropriate times to provide simulated experiences that familiarize them with practical application of the knowledge and skills acquired in the course. Corporate annual reports, quarterly financial results and the information from corporate databases (CMIE, Capitaline, RBI etc.) form the basic inputs for students

Contributors

- Senior Financial Analysts
- Company Secretaries
- Accountants

FINA 316
Financial Management for SMEs

This course provides a foundation of financial management concepts specific to SMEs. This will enable the student to understand how small and medium enterprises make important investment and financing decisions and how they establish working capital policies. Various sources of financing are discussed. The course covers an exposure on financial tools and techniques which help the learner to understand how SMEs maximize value by appropriate capital budgeting, capital structure, and working capital management decisions.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Evaluate various financing options available to SMEs and make the appropriate choice
- Forecast working capital needs for a firm and efficiently manage cash flow
- Apply measures of cost-of-capital and financial leverage to form long-term financial policies for business
- Utilize capital budgeting techniques to make right choice of investments

Activities

- Meeting with entrepreneurs who have made a mark in their field of business and record their experiences in organizing and mobilizing finance
- Meet bankers and vendors to understand their experiences in financing the SMEs

Contributors

- Finance Managers
- SME Entrepreneurs
- CFOs
- Bankers
- Organizations representing SMEs

FINA 327
Corporate Financial Management

This course focuses on corporate financial decision making. The objective of the course is to develop the ability to apply financial management concepts and tools in the business context. It elaborates the capital expenditure evaluation methods and explains the methodology for computing cost of capital. Apart from bringing out the implications of dividend policy on the valuation of the firm, this course highlights the nuances of working capital management, which is crucial to the successful performance of a firm.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Understand the duties and responsibilities of a CFO
- Compute cost of capital and apply measures of cost of capital and financial leverage to form long-term financial policies for business
- Utilize capital budgeting techniques to maximize return on investment
- Employ corporate financial principles towards analytical valuation of new ventures
- Manage working capital effectively to ensure successful performance of the firm
- Manage the value of the firm by establishing appropriate dividend policies, bonus share policies, stock splits and share buyback

Activities

- Group and individual work on analysis of cases that are based on a situation that an actual firm has faced in the past where the student's task is to recommend a value-creating course of action that could be taken up by the managers of the firm

Contributors

- Inventory Managers
- MDs and CEOs
- CFOs

MKTG 226
Understanding Markets

An informative introduction to marketing, this course provides a basic understanding of marketing structures and techniques including fundamentals of supply and demand and using planning and forecasting techniques. The course covers the concepts of economies of scale and the laws of returns to scale and their effect on production decisions. It also examines the implications of the market structure and competition to marketing decisions and seeks to develop the student's understanding of how the firm can benefit by creating and delivering value to its customers and stakeholders. The course uses lectures from marketing experts, case discussions, case write-ups and student presentations to achieve these objectives.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Analyze markets and understand customer needs
- Measure customer demand for a product or service
- Understand the theory of demand and demand forecasting techniques and utilize them to analyze and forecast demand
- Use economies of scale and laws of returns to scale to maximize returns.
- Study the competition and utilize inferences to come up with production and pricing decisions

Activities

- Students will perform a market survey of a specific product or service with the goal of determining the demand, the target market and an analysis of the current competition. They will document the process followed and the data collected in the form of a marketing report and present their findings

Contributors

- Marketing Executives
- Product Managers

MKTG 317
Marketing Practices

Building upon the introductory course Understanding Markets, this course will focus on selection of businesses and segments to compete in, allocating resources across businesses, elements of the marketing mix and other significant strategic issues facing today's managers in a dynamic competitive environment. Consumer behavior concepts are related to the various dimensions of market segmentation and marketing strategy. Students will learn about the role and importance of promotion, advertising, branding and distribution in marketing.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Apply analytical methods to segment the global marketplace and position a product or service appropriately
- Make decisions on pricing for stronger competitive positioning in the global market place
- Apply branding techniques to create, develop and position a brand
- Establish optimal distribution channels for effective distribution in the host market
- Develop appropriate advertising and sales promotion strategies including online marketing for maximum reach in the global market
- Identify target markets and market entry methods to introduce new products

Activities

- Case illustrations that focus on segmentation strategies, product positioning and advertising appeals

Contributors

- Managers of Advertising Companies
- Marketing Consultants
- Marketing Officers

MKTG 414
Customer Relationship Management

This course will enable students to learn the basics of Customer Relationship Management (CRM). It covers the complete lifecycle of CRM including establishing relationships with new customers, developing customers, account management and customer retention. The various types of relationship marketing, CRM strategy, sales force automation, enterprise marketing management, benchmark and metric and vendor selection are covered as well. Apart from this students will learn how to leverage databases, data warehouse and data mining in marketing and customer relationship management.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Establish and develop relationships with new customers
- Develop a clear understanding of the CRM lifecycle and utilize it to develop and retain customers
- Build a database for Relationship Marketing
- Develop Sales Force Automation for an organization
- Leverage data from databases, data warehouse and data mining to do targeted marketing
- Aware of the various solutions available for CRM and evaluate and choose the appropriate system for the business

Activities

- Identify an organization and spell out a strategy for sales for automation or suggest improvements in the existing strategy
- Visit a big corporate entity and talk to marketing head to understand their marketing strategy and how they do it

Contributors

- Account Managers
- Customer Service Managers

PROD 223
Manufacturing Management

This course provides an understanding of the processes involved in manufacturing industries and includes a substantial module on quality management. Students are exposed to various aspects of manufacturing management including production design, planning, productivity, competitiveness, and location planning. Students learn about standard analytical tools for forecasting, inventory control, production schedules and allocating resources for operational effectiveness and efficiencies. The unit also introduces the concepts, advantages and implementation of just-in-time strategy in the context of supply chains.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Design manufacturing plant layouts, process layouts, product layouts and assembly lines using lean manufacturing and other techniques
- Perform Production planning, sequencing and scheduling
- Handle purchase and manage inventory and material
- Apply Manufacturing Management techniques to improve productivity and efficiency and reduce cost
- Bring about Total Quality Management (TQM) using various quality management tools

Activities

- Visits to manufacturing facilities followed by a report that includes observations and recommendations for enhancements of the processes
- Guest lectures from industry experts
- Research and profile types of manufacturing processes

Contributors

- Production Managers and GMs
- Purchase Managers
- Supply Chain Managers

PROD 315
Services Management

This course begins by defining services and categorizing different services. Customer expectations of services, sources of these expectations and the factors that influence them for pure services and product related services are discussed. Next, customer satisfaction is defined along with its relationship to service quality. Building customer relationships through research and the importance of recovery from service failures are reviewed. Customer's role, employee's role and the role of intermediaries and electronic channels along with managing demand and capacity in delivering customer services are discussed. Lastly, strategies on pricing for providing various services are established.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Understand the difference between goods and services and differentiate between service industries (ex: hotels and hospitals), service as products (ex: IT companies) and customer service
- Understand customer behavior and customer expectations
- Design research methods to understand customer needs
- Build customer relationships (from strangers to acquaintances to friends and ultimately partners)
- Present strategies to recover from service failures
- Determine the roles of various people and entities in delivering services
- Work out a strategy on pricing for various services that are provided by an organization

Activities

- Case studies of successful service based organizations along with discussions of service policies adopted and the challenges faced in an Indian context
- Taking a service sector as an example, a project report on explaining the differences in service expectations across different countries

Contributors

- Customer Relationship Manager from a prominent service industry – a hotel or a hospital
- Program Manager from a IT company

PROD 326
Global Supply Chain Management

This course provides students with a strong foundation in Supply chain management, which is essentially the streamlining of supply-side activities to maximize customer value in order to gain a competitive advantage in the marketplace. Students will develop the ability to conceptualize, design, and implement supply chains and align it with product, market, and customer needs. Managing the flow of products, information and revenue across supply chains differentiates the ability of supply networks to fulfill customer needs. Students learn to evaluate how information flows can substitute for the stock of physical resources, such as inventory, and why such systems succeed or fail. They assess how internet technologies, dynamic markets, and globalization are impacting supply chain strategies and practices.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Implement supply chains, which are aligned with business models for manufacturing and service companies in the global context
- Identify risks of the global supply chain and develop strategies to mitigate such risks
- Configure logistics networks and assess their performance impacts on efficiency and service levels
- Design supply chain contracts for effective governance of supply chain relationships
- Develop an understanding of procurement, e-procurement, warehousing, transportation and shipping, inventory planning and contract management within an overall supply chain context
- Leverage IT developments in supply chain management including RFID and SOA

Activities

- Students analyze companies that have implemented successful global supply chain management strategies in the last decade. They will document the results of their analysis in a report and present their findings to the rest of the class where they highlight the main aspects of the strategy that led the company's success

Contributors

- Inventory Managers
- Purchasing Managers
- Supply Chain Managers

HRMT 116
Interpersonal Effectiveness

The workplace is continuously facing challenges from the pressure of workload, working with groups, teams and stakeholders and changing environments. It is the intent of this course to prepare individuals with excellent interpersonal skills so that they can be personally effective and contribute to organizational growth. In this course, students get introduced to the practices and principles of interpersonal communication and effectiveness in a variety of contexts and relationships. It provides a strong foundation for individual behavior in an organization by exposing the students to the skills behind interpersonal effectiveness. Students will be provided with opportunities to refresh and develop these core interpersonal skills in a lively, open and highly interactive environment, enabling them to become more confident and effective interpersonally.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Build rapport and trust in organizational settings
- Present themselves and their ideas with clarity, professionalism and positive attitude
- Recognize the importance of self-motivation and individual goal setting
- Aware of different behavioral styles and learn to modify their behavior to achieve best results
- Apply strategies for soliciting and providing effective feedback in order to build better relationships
- Anticipate communication errors and prevent them
- Effectively use conflict management strategies to manage and resolve conflicts under various circumstances, build trust and strengthen the bond between involved parties
- Make use of all of the above skills to ensure effective teamwork
- Create individual action plans for ongoing personal development
- Understand the sources of stress and effectively manage stress in the work environment

Activities

- Students will have the opportunity to participate in guest-lectures, games, group discussions, role plays, skill-building exercises, and case studies that enable them to discover their interpersonal relationship gaps and to practice skills in the area of listening, feedback, questioning, vocal and non verbal communication

Contributors

- HR Directors
- Managers

HRMT 124
Organizational Behavior

This course provides an overview of topics and concepts in the field of Organizational Behavior (OB) and is oriented toward developing a better understanding of human behavior and using that knowledge to help people be more productive and satisfied in organizational settings. Emphasis is on developing a grasp of issues and problems and an understanding of practical implications of various theories of human behavior at work. It investigates the impact that individuals, groups and structure have on behavior within an organization, and then applies that knowledge to make organizations work more effectively.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Understand the kinds of organizational structure and design and choose the appropriate structure based on nature of business
- Demonstrate the essential interpersonal skills for being an effective leader of high performance teams in entrepreneurial and established organizations that have diverse membership
- Correctly use conceptual frameworks from management research and practice to diagnose and improve individual performance and group dynamics
- Understand and manage organizational culture effectively for organizational development
- Work and learn independently, exercise initiative and take personal responsibility for their own work, and operate effectively within a team environment demonstrating team building and management skills

Activities

- Students will form teams to organize a major event on campus – A cultural event or an academic conference, under the guidance of staff. They will be responsible for all aspects of the event including fund raising, invitations, food arrangements and events scheduling. This will give students an opportunity to work as a team and apply OB concepts in achieving a common goal

Contributors

- HR Directors
- Managers

ENGL 212
Business Communication

With an ever-increasing reliance on virtual methods of communication, particularly email, the ability to articulate ones thoughts in written forms is as crucial as ones ability to communicate orally. This course is designed to give students a comprehensive view of communication along with its scope and importance in business. The role of communication in establishing favorable relationships both within and outside the organization is emphasized. The various types of business communication media are covered. This course also develops an awareness of the importance of succinct written expressions in modern business communication.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Demonstrate competence in receptive communication and the ability to comprehend written material that uses business jargon and terminology
- Deliver oral presentations that are courteous and correct
- Produce written communications that are clear and concise using recognized business formats
- Show the ability to communicate effectively with diverse audiences
- Present data coherently and effectively in business settings bringing together information in a well-organized manner
- Demonstrate the ability to receive ideas and draw logical conclusions
- Compose routine letters, memos, email messages, goodwill messages, negative messages, persuasive messages, application letters, and various types of business reports
- Conduct meetings and conferences, record proceedings and minutes and communicate the same to participants

Activities

- Students will be tasked with writing reports that capture information from specific business articles followed by oral presentations of their inferences

Contributors

- C-Level Person
- Sales and Marketing Professionals
- Project Managers
- Journalists

HRMT 225
Managing Human Capital

This course outlines the roles and responsibilities of the members of Human Resource Department including the role of HR Professional as a strategic partner in managing today's global organizations and workforce. Key topics such as recruitment and retention, training and development, performance appraisal and growth, compensation, employee rights and security and implications of legal aspects in global environment will be discussed. Additionally, students will learn about evolution of HRM in the current scenario, importance of diversity, sexual harassment policies, managing rising benefits cost and expose them to various tools, processes and systems.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Create a management structure for an organization, create job descriptions and use the available resources to identify candidates
- Identify training needs for a particular department and create a training plan for the employees
- Conduct objective based performance appraisal and rate employees appropriately
- Create a compensation model that is appropriate for an organization taking into effect the market conditions, benefits and mandatory requirements
- Identify an appropriate information management system for record keeping and automation of HRM functions

Activities

- Create a management structure for a company
- Create job descriptions and recruitment plan to fill the identified positions. Download resumes and submit a report summarizing the reasons behind your decisions
- Identify any company of your choice and understand their existing performance appraisal model and propose a model that you feel would be better for them. Justify your reason
- Identify a department in a company and identify their training needs and figure out an experiential training program and submit a report with the outcomes of the program

Contributors

- HR Directors
- Managers
- Recruiters

ENTREPRENEURIAL COMPETENCIES

ENTP 418
Organizational Success through Innovation

The course will introduce the basic concepts of innovation (radical, incremental, disruptive; product, process, service, business model innovations) and the need and relevance of innovation focus in organizations. Students will understand through case studies and examples what innovation focus is, how it is achieved and maintained and how it demonstrably makes a difference to organizational growth and survival. Students will learn and appreciate the steps that are needed to be followed in taking an opportunity/idea to market. The course will give a clear understanding of the value of intellectual property, how it is created/acquired, protected and leveraged. Topics on institutional mechanism available for innovation, importance of networks, understanding and importance of cluster approach in knowledge acquiring through selective co-operation and innovation in the global context will be introduced.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Develop a clear understanding of the basic concepts of innovation, its relation and relevance to organizational growth
- Create an environment in the organization that fosters innovation
- Practice continuous innovation as opposed to a one time effort
- Utilize a systematic approach to take ideas to market following all the steps including basic innovation, market research, proof of concept to Prototype design, development, testing, final design, developing a business plan, resource mobilization and launching the product
- Recognize Intellectual Property (IP) and take necessary steps to protect it and leverage it
- Leverage available Institutional support for Innovation in various areas including innovation, funding, mentoring, networking, policy support and technology development

Activities

- Students will prepare a report on the innovations that have been made in a specific industry, which illustrates how these innovations have enhanced the industry. Cite examples of corporations and show how they have capitalized on these innovations and grown.

Contributors

- Governing members of innovation and entrepreneurship cells
- CEOs and MDs

ENTP 521
Disruptive Innovation & Technology

The purpose of this course is to help students understand what disruptive innovations are and expose them to some examples and the areas of business and technology that these innovations have impacted. It also covers what organizations need to do to survive when confronted with disruptive technologies that threaten their current way of business. A general model of survival will be introduced and used to analyze companies and industries that have failed or are close to failing. The course includes case studies of some large companies that have not survived disruptive innovations in their fields. In addition to firms that have failed, students will look at some that have survived and are doing well. By highlighting the reasons for the decline of firms and industries, students can begin to understand how to prevent such declines. Through the study of successful organizations, students will learn about approaches to disruptions that actually work.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Explain how technology and changed business models create disruptive innovations
- Provide insights into disruptive innovation through analysis of classic examples
- Assess the impact of disruptive innovations on SMEs
- Demonstrate the skills to develop a strategy for survival in a world confronting one disruptive technology after another

Activities

- Assignment on identifying one disruptive innovation in the recent past and how it has changed the market, clearly identifying the winners and losers and why winners were winners and losers became losers. Specifically identify the impact it had on survivors and how they rode the wave

Contributors

- CEOs of new successful companies
- Management Consultants

ENTP 512
Business Plan

This course will lay the foundations for writing sound business plans. It will cover principle elements of business plan such as the executive summary, the organizational plan, the marketing plan, the financial plan, the management description and risk analysis. Students will learn about the information needed to make a business plan (research on market potential, customer profiles, manufacturing costs, projected financial statements), how it is to be gathered and presented. They will also get an understanding of how expectations of investors are met through.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Perform feasibility analysis using appropriate tools to determine the worthiness of a potential new business idea
- Complete a comprehensive business plan that includes an executive summary, industry and market analysis, a marketing strategy and plan, operations plan, product/service development plan and company structure
- Create and effectively communicate the business plan to potential investors both orally and in written form, for an entrepreneurial venture at any stage
- Articulate technological, operational and market risks with appropriate mitigation strategies
- Identify the financial requirements of a new business and develop pro forma financial statements
- Construct an optimal path that achieves milestones and anticipated investment exit strategies
- Constructively evaluate other business plans and funding strategies

Activities

- Students will form teams each of which will be linked to pre-screened innovators with products/services with potential market. They will work with them in developing the idea and help them prepare a detailed business plan. An opportunity will be provided to present their plans to a live set of investors of venture fund

Contributors

- Successful Entrepreneurs
- Loan Officers
- Venture Capitalists

ENTP 514
Launching Global Ventures

Nowadays, many ventures launch with presence in multiple countries right from the beginning. This course addresses the various intricacies and challenges involved in launching such a venture. A survey of various global business models is conducted. Various other factors such as choice of location, resources required, constraints that can be faced due to local government policies, economy and culture, concerns with respect to growth, local markets and competition are addressed.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Have an understanding of several successful start-up business models that have launched globally
- Understand the importance and impact of local culture, politics, competition on a global business
- Utilize fundamental cultural elements to lead and motivate multicultural workforces in a global context
- Design sustainable business operations and strategy in agreement with local culture that delivers value to global consumers

Activities

- Case studies of successful start-ups that have launched globally
- Pick few countries of choice and analyze factors that affect a business such as government policies, work culture, economy etc

Contributors

- Venture Capitalists
- Successful Entrepreneurs of Start-Up Companies

ENTP 523
Managing Family Business

The course provides an exposure to family owned and closely held businesses and addresses the special issues faced by these businesses. Students learn about the special dynamics in such firms and how to be professional managers in such organizations. This course examines the various aspects including management, financial, legal, personal, and interpersonal issues specific to such firms. Students also learn about succession planning, managing the succession while building financial security.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Demonstrate the ability to address the behavioral, operational, and strategic issues prevalent in family firms
- Show proficiency in effectively managing and coping interpersonally within these complex and emotionally charged organizations
- Leverage outside resources to enhance the business which family owned and closely held businesses are usually reluctant to do
- Professionalize the board room and face the unique governance challenges of family owned businesses

Activities

- Students are sent out into the business community to investigate a family business of their choice. They are grouped into teams that find an organization that is willing to provide them with the details. Students who are already part of a family enterprise may choose select their own family firm. Students will analyze the business and apply techniques learnt in the course to enhance the business, and present their results to the rest of the class

Contributors

- Family Business Owners and Managers

ENTP 524
Venture Finance

The course is a primer on venture capital. It will help understand questions on what venture capital is, how it is different from other sources of finance and when one seeks venture capital. The role venture capital plays in success of new firms, the revenue model for venture capital firms, the selection criteria of venture capital firms (product, market, financials and entrepreneur and team) and exit policy will be covered. Students will also get exposure to valuation of different kinds of businesses, the key factors influencing valuation and the various methods of valuation, This course will include case studies/seminars of successful ventures created through venture capital route

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Determine when a business venture should seek venture financing
- Be aware of the various types of venture financing available and seek the right type based on the stage the business is in
- Choose the appropriate venture funding firm based on the value it brings to the business
- Create and interpret term sheets for venture capital financing
- Value a company and use it to negotiate a venture capital term sheet

Activities

- Prepare a term sheet for the business plan developed as part of the business plan course followed by a presentation
- Lectures from fund managers from Venture financing companies
- Group Discussions and seminars on success stories and failure cases in venture-funded projects

Contributors

- Venture Capitalists
- CEOs/MDs of startup ventures
- Entrepreneurs who have secured venture funding

MKTG 324
Strategic Marketing

This course is designed to develop skills in formulating and implementing marketing strategies for brands and businesses. Marketing strategies for various kinds of markets such as growth, mature and declining markets will be discussed. The course will emphasize the role and implications of strategic marketing decisions taken by a firm in the long-term growth of the business. Students will get exposure to the latest analytic tools and their use in making optimal use of marketing research information to reduce uncertainty in product design and positioning.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Make tactical and strategic business decisions based on the proper interpretation of marketing research results
- Develop a marketing plan taking into account the nature of the product or service and the type of market it would be introduced in – growth market, mature market or declining market
- Utilize data from environment analysis, competitive analysis and consumer behavior trends when formulating long term and strategic marketing plans
- Choose the appropriate mode of marketing – direct, network and affiliate marketing
- Leverage latest communication and technology tools including social marketing to gain competitive advantage in the marketplace

Activities

- Students will do a group project where they will form teams that oversee design and marketing of new products, advertising, budgeting, sales force sizing and allocation, and production planning. Each group will be required to submit a report of their results and present their work to a team of marketing experts.

Contributors

- Marketing Officers
- Senior Marketing Analysts

MKTG 415
Market Intelligence

The objective of the course is to provide a wide exposure to marketing research methods. The course is aimed at the manager, who is the ultimate user of the research and is responsible for determining the major scope and direction of research activities. Techniques of data collection, evaluation of alternative sources of information, and methods of evaluating data and presenting the results are covered. Students will recognize the role of systematic information gathering in market analysis. They will develop the ability to utilize techniques that will transform mere data in to information, which is useful in making marketing decisions.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Describe what marketing research is, what kinds of information it can provide, and how it is used by marketing management
- Identify the right sample and choose the appropriate data collections method for a specific market analysis
- Demonstrate proficiency in using latest tools to analyze data obtained through marketing research
- Write a marketing research report and make an oral presentation of the research results to back up the managerial decisions made based on such data

Activities

- Students will go through an exercise of data collection and analysis for a specific product or service and arrive at marketing conclusions based on the results

Contributors

- Market Analysts
- C-Level Executives

ENTP 511
Entrepreneurial Leadership

The course will create an understanding of the challenges and opportunities that are created in today's business environment and the importance of entrepreneurial leadership in such environments. It examines and evaluates various leadership styles that are essential for business improvement. The objective of the course is to enable the students to be effective leaders to influence others to work towards a common goal in a fast paced and rapidly changing business environment. Students are also exposed to using these techniques in conflict resolutions among diverse teams.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Absorb uncertainty, shoulder responsibility and promote willingness among employees in an organization to achieve a common goal
- Lead by example and motivate his or her team to identify opportunities to gain organizational advantage
- Learn fast within an environment of ambiguity and change, effectively manage change and risk while providing clarity and coherence for those around him or her
- Be a proactive leader and take responsibility for his or her actions
- Resolve conflicts among team members and look for innovative ways to lead them to achieve organizational goals

Activities

- Role Play (leadership training)

Contributors

- Successful Entrepreneurs
- Consultants
- Leadership Trainers

ENTP 513
Global Strategic Management

This course provides an overview of globalization and key challenges facing managers in a global context. Students get exposure to corporate responsibility, the need for global marketing, understanding the sources of competitive advantage, competitive dynamics and creating sustainable value for stakeholders. They will also learn about forming strategic alliances and partnerships and the risks associated with them. The course will provide students with the ability to design and implement a global strategy, manage a highly diverse organization, optimize finance in a complex and volatile economy, and build a strong leadership culture.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Analyze the changing global business environment, understand the sources of competitive advantage and represent value proposition of the organization
- Strategically position the firms offering in a global context with the goal of building sustainable value for the firm and its stake holders
- Identify target markets to enter and develop a global marketing plan that includes global sourcing and locating global sourcing partners
- Choose the right foreign firms to form strategic alliances and partnerships with, taking into account the strengths and synergy they bring to the table
- Analyze mergers and acquisitions and leverage buy-outs and initial public offerings
- Judge whether a firm's operating strategies are consistent with economic conditions

Activities

- Students will analyze cases of organizations that have made a global impact by growing internationally. Specifically the alliances and partnership agreements entered into by these firms will be studied and students will be required to document their analysis and present their findings to the rest of the class

Contributors

- Global Business Strategists

ENTP 525
Managing Turnarounds

This course focuses on how to recognize, analyze and deal with the problems faced by organizations in distress. Various causes of corporate declines are analyzed and a framework is introduced that shows how to identify early warning signals to detect potential problems. The course then explores the various management issues that arise when a firm needs to start making radical changes to ensure its survival. It will build on knowledge gained in other courses on strategic management, corporate finance, strategic marketing and organizational behavior and takes students through basic and advanced turnaround techniques and examines how to return to leadership. Students will get an overall view of how the ecosystem of turnarounds work and will consider how corporate distresses can be converted into opportunities.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Recognize the need for organizational turnarounds early and rapidly appraise the situation
- Develop a detailed analysis and recovery plan to execute turnarounds
- Manage crisis and make quick decisions on taking emergency actions
- Manage stake holder relations effectively during the turnaround process
- Execute the plan to get through the distress with the goal of emerging as a stronger and better organization

Activities

- Cases are assigned to teach how entrepreneurs and leaders of more mature companies have successfully and unsuccessfully dealt with serious problems
- Lectures from successful CEO/MDs

Contributors

- CEOs/MDs who have successfully turned around companies
- Turnaround Management Consultants

ENTP 328
Legal and Regulatory Aspects of Entrepreneurship

The objective of the course is to develop an understanding of the regulatory landscape and the interaction of legal and business needs of entrepreneurial ventures. The significance of considering the legal aspects upfront and not leaving it as an after thought or an add-on to the business strategy will be emphasized. The course will address a number of key concerns relevant to different stages of an entrepreneurial venture - the choice of business form and organizational structure, enterprise governance, capital structure and different types of equity and debt securities; tax aspects, laws related to executive and employee compensation and intellectual property aspects. The course will also provide some discussion of economic research on entrepreneurship and public policy approaches to nurturing and promoting entrepreneurship as one of the key sources of economic growth.

Student Learning Outcomes

On successful completion of this course, students will be able to:

- Meet the regulatory requirements of starting a business including structuring partnerships, registering the firm with appropriate government bodies, and submitting required documentation
- Seek all relevant approvals applicable to the field of business
- Protect intellectual property by patenting inventions, copyrighting works and registering trademarks
- Develop awareness to human resources and employment law
- Become knowledgeable in general principles of taxation and corporate tax law

Activities

- Practical examples – the writing of partnership agreement (general partnership, limited partnership)
- Identification of list of approvals needed for a specific business venture

Contributors

- Account Managers
- Customer Service Managers

ENTP 416
Business Ethics and Governance

The first part of the course discusses about the need for ethics and its importance in modern day business. Identifying, confronting and resolving ethical issues are discussed with several example cases. The organizational and social implications of ethics (corporate social responsibility), relationship between law and ethics are covered along with the use of codes for prevention of ethical issues. Finally, different ways to foster ethical behavior in an organization is presented.

The development of corporate governance is driven by the need for more transparency and accountability to help investors. The second part of the course covers important features of corporate governance and the governance codes that have been influential globally. The role that shareholders and stakeholders play and the tools institutional investors have in developing corporate governance is also covered. Finally, the internal structure of board, directors and committees are discussed along with the performance measures and remuneration.

Student Learning Outcomes

On successful completion of this course, students will be able to:

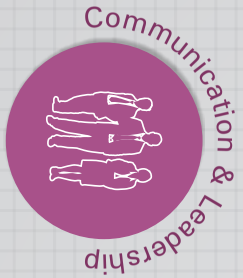
- Identify and resolve ethical issues in an organization
- Understand the need and importance of corporate social responsibility in a global context
- Appreciate the need and understand the role of a good corporate governance
- Understand the relationship between internal boards/committees and shareholders

Activities

- Case studies and group discussions of various ethical dilemmas that can arise in an organization
- Prepare a report on various factors influencing Corporate Social Responsibility for a manufacturing industry
- Case studies of major organizations which have failed due to lack of good corporate governance

Contributors

- Corporate Lawyers
- Company Secretaries



PERSONAL COMPETENCIES

PERC 120
Communication

Summary

Communication is very essential whenever one needs to convey information, make good relationships or help to get what one needs. It can be done is many ways like voice, text or non-verbal depending on the target audience. How well the information can be conveyed and received determines how good ones communication skills are. In our program we enable our students to be able to effectively interact with potential business partners, employers, employees, colleagues etc. We also teach them to resolve conflicts, listen effectively, develop good written and oral communication as well as recognize personal emotions and identify the emotions of others.

Student Learning Outcomes

Students should be able to exhibit the following skills:

- Vocal interaction – Speak fluently with anyone and be able to effectively convey information
- Presentation – Make presentations to a group of people, board members, marketing products etc.
- Writing – Write clear and concise emails, letters etc. without compromising on the correctness of the sentence and what needs to be communicated
- Interpersonal skills – Be able to have an effective conversation/discussion with a group of people or having a performance discussion with employees recognizing personal emotions and emotions of others

Activities

- Experiential learning sessions conducted by leading trainers to learn about communication and listing skills
- Student debate club to enhance verbal communication
- Creating marketing materials and sending out email communication for organizing a campus event
- Publishing white papers on key or new topics
- Discussing with students in campus and identifying their needs and providing a necessary solution by working with the management
- Prepare and send campus news letters

PERC 220
Critical Thinking and Problem Solving

Summary

Critical thinking is the ability to think clearly and rationally, engage in reflective and independent thinking, and use logical reasoning to deduce consequences. Problem solving refers to the ability to use knowledge, facts, and data to effectively solve problems. Today's business environment of ambiguity and constant change needs professionals to have the ability to develop a well thought out solution within a reasonable time frame. They have to be able to think on their feet, assess problems and find solutions.

Critical thinking and problem solving enable the students to "think out of the box" and deal effectively with social, scientific and practical problems. These skills are imparted through several activities and on-site training sessions that include high impact visual aids, video presentations and team games. Students takeaway a toolkit of creative techniques that enables them to cope with the challenges which lie ahead.

Student Learning Outcomes

Students should be able to exhibit the following skills:

- Understand the logical connections between ideas
- Identify, construct and evaluate arguments
- Detect inconsistencies and common mistakes in reasoning
- Work through problems on their own or as an effective member of a team
- Think critically and creatively, share thoughts and opinions, use good judgment, and make decisions.
- Question why an organization follows certain steps to complete a task
- Voice their opinion and offer insight and fresh perspective to better and more efficient ways of doing things
- Adapt to different thinking styles in group and team environments
- Recognize and remove barriers to creativity to foster an innovative work environment
- Systematically analyze a problem, use all the facts and data available and a find an optimal solution

Activities

- Group games to promote critical thinking
- Profiling personal thinking style and the styles of others
- Analyzing left- and right-brain characteristics
- Identifying road blocks to success in a current societal problem and find solutions
- Initiative team games for problem solving

PERC 320
Creativity and Innovation

Summary

Creativity and Innovation is all about the application of a person's mental ability and curiosity to discover or enhance a new process, method, device, product or service for a useful purpose. Every student has the potential to be creative and innovative, but many do not realize their potential or unsure how to take advantage of it. People that think creatively often disagree with status quo and utilize their knowledge/expertise to find a better solution for an existing problem.

Our program is designed to work with all our students in partnership with innovators, researchers and industry leaders to make students realize their creative and innovative potential through various activities, projects, lectures, seminars, field visits and hands on trainings.

Student Learning Outcomes

Students should be able to exhibit the following skills:

- Apply their creative and innovative potential and make improvements or create new things that are useful in whatever they do
- Come up with original, unique and cogent ideas that would be useful to the society or industry
- Exhibit high amount of curiosity in looking at things differently and exploring possibilities of making it better
- Become immersed in challenging status quo for intrinsic reasons

Activities

- Encourage students to perform fundamental research in the field of choice that could lead to filing patents
- Field trips to research institutes, fairs and exhibitions
- Attend seminars and conferences and present papers that have new and creative ideas
- Identify a business or social problem and try to come up with a creative/innovative solution to solve it
- Create and maintain a portfolio of their creations and accomplishments
- Create or participate in incubation projects that have a potential to evolve as a business entity

PERC 410
Personal Ethics and Accountability

Summary

Ethical behavior is about doing the right thing in the right manner, for the right reasons and with the right attitude and is not just limited to following ethical codes, laws and regulations. It is also a precursor for professional ethics. Some examples of personal unethical behaviors are – i) taking credit for something that someone else did; ii) calling in sick when really you are not; iii) passing on information that was shared in confidence. It is self-accountability that helps an individual function ethically and responsibly. While people may be accountable to others, they may not be as accountable to themselves when there is no one else to observe, monitor or hold them responsible. Self-accountability is the ability to look beyond the immediate moment to consider the consequences and know if you are willing to pay them.

Ethical behavior and self-accountability will be practiced everyday throughout the program and is promoted through proper implementation of consequences, rewards and recognition.

Learning Outcomes

Students should be able to exhibit the following skills:

- See the critical links between ethical behavior, competence, and personal accountability
- Share information/tools that reinforce understanding of those relationships
- Have an opportunity to renew commitment to responsible and ethical behavior
- Develop the courage to accept and take responsibility for their own actions

Activities

- Hold open discussions on real life ethics in action and the students are asked to make ethical choices
- A personal ethics quiz to find out about an individual's "ethical potential"
- Expert opinions from spiritual leaders, counselors, attorneys, psychologists, and other experts
- Team games that facilitates fixing responsibility and accountability
- Form accountability group (3-5 people) who can work together to confide in with individual weaknesses and insecurities. The group can then find creative strategies to work together in the direction of the growth

PERC 520
Leadership

Summary

"Leadership is a process of social influence, which maximizes the efforts of others, towards the achievement of a goal or vision". It has nothing to do with personal attributes, it is not just management and it's not about seniority or position. Becoming a successful leader is a lifelong process but the critical period to start the process is in the college years. Leadership is a combination of various skills like ability to delegate, having good communication, demonstrating self-confidence, showing commitment, having a positive attitude, high emotional intelligence, providing vision for the future, motivating people to deliver the vision, being good role model, managing performance effectively etc. and our program enables our students to become great leaders through various methods.

Student Learning Outcomes

Students should be able to exhibit the following skills:

- Lead a group of people in delivering on a goal
- Motivate people to becoming energized and focused on a task at hand
- Demonstrate emotional intelligence and be able to work with a group of people to achieve a goal successfully
- Identify a vision and be able to communicate clearly to a group of people or organization and deliver it
- Communicate complex information, lead in crisis or defend the decision

Activities

- Experiential learning sessions by leading trainers to learn leadership skills
- Lectures, case studies, videos, group workshops and individual activities
- Organize collaboration events and games to bring out leadership qualities
- Organize events inside campus
- Lead community service initiative
- Lead new students orientation planning and execution
- Take MBTI assessment to identify the personality type
- Identify a new facet of leadership that you would like to develop and develop it throughout the program

ADVISORY BOARD & CONTRIBUTORS

ADVISORY BOARD & CONTRIBUTORS

TIPSGLOBAL depends on its advisory board members in addition to the management team to strengthen the curriculum and for continual improvement of the program. These members are renowned senior professionals in the industry and academia. In addition to the advisory board members, TIPSGLOBAL will have a network of long list of contributors from various parts of the industry, who will participate at various levels in the program.

ADVISORY BOARD

Mr. Suresh Kumar is the Chairman of the Values Group, comprising entities that focus on advisory and investment holding services with regard to M&A, private equity and other investments and financial services.He is currently Chairman of (i) Federal Bank Ltd, (ii) its financial services subsidiary, Federal Bank Financial Services Ltd (both in India) and (iii) IDBI Federal Life Insurance Co. Ltd.

Mr. Kumar commenced his 41-year banking career in the State Bank of India (SBI).He moved to Dubai in 1979 and for five years, engaged in project finance, as part of leading industrial initiatives by the Government, such as DubaiAluminium Company (DUBAL). In 1985, he moved back to banking by joining the Union Bank of the Middle East (UBME) and which became the Emirates Bank Group in 1987.

Since 1985, Mr. Kumar has been a member of the senior management of the Group; having held leadership positions covering treasury, capital markets, investment management, private equity, corporate / wholesale banking, remedial credit management etc. during his 27 years stint with (what is now) the Emirates NBD Group.He established Emirates Merchant Bank Ltd (EMBL), Emirates Financial Services (EFS) PSC and a number of other entities for the Group; as well as other innovating investments-related treasury and investment banking initiatives. Called officially as the 'Father of Capital Markets' in the UAE.

Until the 30th of April 2012, Mr. Kumar was a Chief Executive Officer (CEO) in Emirates NBD Group as well as being a member of the Board(s) of Directors of Group entities – namely Emirates Financial Services (EFS) PSC, Emirates NBD Capital Ltd (EmCap), Emirates Funds LLC (EFL) and, earlier, Chairman of Emirates Bank Austria.

Mr. Kumar graduated from the Sydenham College of Commerce and Economics of the University of Bombay with a Bachelor of Commerce (Honors) degree in 1971. He also completed (post-graduate) investment management programs conducted jointly by the Stanford University and the London School of Business as well as an Advanced Management Program (AMP) at the Columbia Business School. He is a full-fledged 'Fellow of the Indian Institute of Bankers' as a high-ranking banking associate.

He is a recipient of several accolades including the prestigious “Hind Rattan” (Jewel of India) award in January 2012. He is a Founder (and Past President) of the Indian Business & Professional Council and the erstwhile Indian Business Council. He was member of the Founding Committee of the Dubai Community Theatre & Arts Centre.

ADVISORY BOARD

Prof. Ramakrishnan has been teaching management for more than 40 years. He was Professor at the School of Management, Bharathiar University, Coimbatore, India and has taught at Bowling Green State University, Ohio, Pennsylvania State University and Indian Institute of Management, Bangalore. He was also a visiting faculty at North Eastern Hill University, Shillong. Throughout his teaching career he had been actively involved in the curriculum development process and has been responsible for introducing innovations. He has also been responsible for initiating and sustaining programmes for developing the soft skills of the graduating students.

Prof. Ramakrishnan has been active as a resource person for programs on case method of teaching and other in-service programs for young teachers through programmes of the Academic Staff Colleges of different universities, not only in management subjects, but also on topics such as "Effective use of education technology", "Education and Globalisation", "Issues in Accreditation" etc.

As the Director of the School of Distance Education, Bharathiar University, Coimbatore, Prof. Ramakrishnan expanded the operations significantly by introducing innovative services and new centers. As a member of the Syndicate of Bharathiar University (Nov 2001-Jun 2004), Prof. Ramakrishnan had an opportunity to look after the functions of the vice-chancellor, as a member of the sub committee constituted for that purpose

Prof. Ramakrishnan assisted the Tamilnadu State Planning Commission to evolve the 10th plan proposals pertaining to the education sector. He was also the primary researcher of a study – commissioned by the TN Sate Planning Commission – to assess the status of vocational education in TN and suggest approaches to strengthen the same and also served as an expert member of the sub committee on vocational education constituted by the Planning Commission, GoI during 2009-10. As a member of the Focus Group on Work and Education, he assisted the National Curricular Framework Review process initiated by NCERT in 2005. He has assisted, through a national level NGO, the National Literacy Mission and the Ministry of Rural Development for facilitating the implementation of Total Literacy Campaigns and related rural development programs across the nation.

Prof. Ramakrishnan has authored several articles both for academic journals and for the popular press and has contributed chapters in books published by Croom-Helm, Sage etc. Some of his research reports had been extensively reproduced by agencies such as UNICEF for circulation among interest groups. He had his engineering education at the College of Engineering, Guindy, has had management education at IIM, Ahmedabad as well as at several Universities in the United States.

ADVISORY BOARD

Mr. John South is the Chief Security Officer of Heartland Payment Systems, John South leads the company's security and IT compliance programs which encompass the protection of sensitive data through risk and threat modeling and compliance with internal as well as industry and regulatory obligations.

Recently chosen the 2013 CSO of the Year by SC Magazine and the recipient of a Peer Recognition Award at the annual CISO Summit, South currently serves on the Board of Directors of the Financial Services Information Sharing and Analysis Center (FS-ISAC), the only industry forum for collaboration on critical security threats facing the financial services sector.

Prior to joining Heartland in September 2009, Mr. South held information security leadership roles for a variety of companies including Convergys (Intervoice) and Alcatel-Lucent, where he spent several years in Antwerp and Paris leading Alcatel's European information security operations.

Outside of the corporate world, Mr. South is an adjunct professor at the University of Dallas where he currently teaches a course on the legal and compliance implications of security. Prior courses taught included digital forensics, e-Commerce security and the security foundations course. He has also taught course on statistics, calculus and discrete mathematics.

ADVISORY BOARD

Dr. Venkateshwar 'Venkat' K. Reddy has served as Dean of the College of Business at the University of Colorado at Colorado Springs since 2004. He also serves as the Assistant Vice Chancellor of Online Programs for the university. Dr. Reddy has played a critical role in the success and external recognition of the college's academic programs. He was instrumental in some of the school's major initiatives, including the development of the Distance MBA Program and successful completion of its Maintenance of Accreditation with AACSB International, the Association to Advance Collegiate Schools of Business. The accreditation review recognized several successful programs at the college: Bachelor of Innovation™, Distance MBA, Undergraduate Online program, Daniels Foundation Ethics Initiative, and the collaborative relationship with the college's alumni and the local community. Under Dr. Reddy's leadership, the college was recognized by 'US News and World Report' as being among the top third of the AACSB International business programs in the country. He is most proud of the great group of faculty, staff, and alumni who work hard to further the college's vision of building successful futures.

Dr. Reddy strongly believes the College of Business should be a resource to the local community through educating business professionals and sharing the expertise of faculty and staff. He encourages faculty and staff to develop their entrepreneurial ideas into programs that benefit students and the community. His collaboration with the campus, community and alumni contributed to the college's recognition by the Colorado Springs Economic Development Council with the 2008 Community Enhancement Award. More recently, the Daniels Fund gave the college a five-year $1.25 million grant to establish the Daniels Ethics Initiative, which helps instill ethical decision making skills in students.

Dr. Reddy has been actively involved in the Economic Development Corporation board since 2005 and continues to serve the local community on several boards including the combined EDC-Chamber, Goodwill Industries, Wells Fargo, and the Colorado Springs Technology Incubator, among others.

Selected Service Activities

Board Member of the Colorado Springs Regional Business Alliance
Board Member of the Colorado Springs Police Foundation
Community Board Member of the Wells Fargo Bank
Member of the CU Presidential Search Committee
Member of the Colorado Springs Technology Incubator Board
Member of the Junior Achievement's 21st Century Skills task force
Facilitator for Dream City 2020 project
Member of the Colorado Springs E-Commerce Readiness Assessment Committee

ADVISORY BOARD

S.V.Krishnamurthy aka SVK is a successful entrepreneur & a pioneer in the outsourcing space. He entered into it as early as 1989 when he was appointed as one of the 1st group of Service Providers by Citibank's credit card operations in India. SVK co-founded and successfully exited Professional Management Consultants P Ltd (1995-2009), a 900+ BPO financial services company to SBS Ltd – A Sundaram Finance Ltd group Company . He continued as President & CEO upto March 2009 to enable smooth hands off to complete the transaction.

His experience encompasses operations of the entire gamut of financial services, with focus on retail banking. He is presently into Forensic Audits & Investigation – an emerging field in the Indian Corporate scene.

SVK is a Bachelor in Commerce from Loyola College, Chennai and Fellow Member of the Institute of Chartered Accountants of India (1982). SVK has a passion for law which prompted him to take up the Company Secretary course which he completed in 1983 and presently is a Fellow Member of the Institute of Company Secretaries of India.

Prior to founding SmartKapital (www.smartkapital.com), he co-founded Valley Creek Software Services India Pvt Ltd , a company in the CRM (Siebel) space which is doing work predominantly for the US markets. Then he became an active investor in emerging sector companies. He is a Co-founder of Micello Inc. (www.micello.com) , a US-based mobile VAS start-up. He co-founded Asirvad Microfinance Pvt.Ltd, (www.asirvadmicrofinance.co.in) India which has now over 80+ branches in Tamilnadu & recently opened a couple of branches in Kerala. He has also invested in a few startups in the US in the Healthcare & Identity Management Space.

Presently is a Financial Trustee for REACT (Ranji Educational & Charitable Trust). SVK is a Charter Member in TiE, Chennai, actively involved in mentoring entrepreneurs and is part of the evaluation group in PitchFest – where entrepreneurs are selected to pitch in front of the Investors for funding / mentoring - part of the TiE Conference, conducted yearly.

THE CORE TEAM

Mr. Ashok Kumar founder of a pioneering chain of International schools "TIPS" with a vision to create global citizens by embracing a child-centered philosophy that promotes creative thinking and lifelong learning. Currently the chain of schools are spread over several campuses and several countries offers such global learning environment to over 5000 students. He has been the catalyst in bringing the first IB World School in Tamil Nadu and Kerala offering the Primary Years Program of the International Baccalaureate Organisation based in Geneva. He has also been instrumental in making "TIPS" certified by the University of Cambridge, UK, as an International Centre for child assessment and evaluation. He is personally involved in the development of programs from K-12 especially from: Early years, where he believes that "a child's spark is where a school should begin."

He believes in nurturing the young student's curiosity, to develop creative problem-solving skills and inspires confidence to approach new situations with skill and independence. He also believes in providing students a caring, creative and open-minded environment with a strong emphasis on individual learning styles.

On a personal note he holds a post graduate engineering degree and a Masters in Business Administration degree from prestigious universities in the USA. He has been working with leading companies like Xerox Corporation, Microsoft Corporation and Intel Corporation for over 15 years in various capacities responsible for developing and creating innovative training and development programs across various regions of the world.

Dr. S. Narayanan has a Bachelor's Degree in Electrical Engineering and a MS and PhD in Electronic Materials from Texas A&M University, Texas, USA. Dr. Narayanan has also worked at various levels including executive capacities, in research & development and manufacturing, managing various projects and teams. His contributions include several publications in leading journals and several patents related to materials and processes. Always having a keen interest in teaching, Dr. Narayanan's current interest is geared towards contributing to the field of education and making a positive difference in a fundamental way.

THE CORE TEAM

Dr. A. Chockalingam is experienced in both academia and industry; he has taught engineering courses at Texas A&M University. He has over 15 years of industry experience leading teams in designing and developing commercial software applications and systems. He has a keen interest in higher education and research. His contributions include publications in leading journals and a patent in the Information Technology space. He has a Bachelor's degree in Engineering from Birla Institute of Technology and Science, in India, and a Doctorate degree in Engineering from Texas A&M University, College Station, Texas, USA.

Mr. K.P. Senthil Kumar is an Engineering Graduate from Government College of Technology, Coimbatore. He has around 18 years experience in Software Quality Assurance, IT Operations and Project Management in multinational software companies and managed large teams. He has been a Director in Microsoft (USA & India) and in varying capacities for over 12 years. He has also been a founder of couple of successful entrepreneurial ventures in the capacity of Managing Director and Director. He has a great passion for quality, taking care for customers and doing things in an organized way all along his tenure.

THE CORE TEAM

Dr. Jawa is a Professor of Mechanical Engineering at California State Polytechnic University. He received his Ph.D. from the University of Massachusetts at Amherst. Dr. Jawa is recognized as an outstanding engineering educator for his innovative and engaging teaching pedagogy. He is a recipient of numerous awards including the Northrop Grumman Excellence in Teaching Award. He is a Fellow of Biomimicry Institute. Dr. Jawa also served as a faculty at Rowan University, NJ and Kettering University, MI. At Kettering University he received Rhodes Professorship award for outstanding research. Dr. Jawa founded one of the largest K-12 robotics outreach program in the US popularly known as Robotics Education through Active Learning (REAL), which has reached thousands of students in the US and abroad.

Mr. D. Karthikeyan has a Bachelor's Degree in Electrical Engineering and a MS in Electrical Engineering specializing in VLSI Design from Oregon Graduate Institute, Oregon, USA. Mr. Karthikeyan has been working for Intel Corporation for the past thirteen years in design, tool and flow development. His expertise is in the field of Back-End Verification (Static Timing Analysis) of VLSI designs. Ever since Mr. Karthikeyan completed his Master's Degree in USA, he was fascinated by the mode of Education that is focused more on understanding of concepts through practical applications and is committed to contributing to this mode of education.

PROGRAM CONTRIBUTORS

Mr. Madan Chandramohan successfully created a brand in the animation & visual effects industry and had made a successful exit from the startup. He has been one of the mentors for Clean Tech Open, the world's largest accelerator for clean-tech startups. Consulting has been his core. His major focus has been on information technology, education, business process and start-up environment. Mr. Madan has developed an extensive network of business relationships focused on rapidly expanding organizations. He holds rich experience in Strategic Management, Corporate Finance, Project Financing and Team Building. He graduated from Bharathiar School of Management and Entrepreneur Development and is carrying a combined experience of more than 10 years working with Citi Group and a self made entrepreneur.

Mr. Seshagiri Thyagarajan is a Mechanical Engineer (IIT Madras) with post graduation in Management (IIM, Bangalore). He has more than 30-year association with the Small Medium Enterprise (SME) movement in the country. He has vast experience and excellent understanding of various aspects related to SME development such as finance, marketing, entrepreneurship and innovation. He has been involved with innovation incubation projects and has worked closely with several innovators and entrepreneurs on their journey from idea to market. His work experience also includes working in projects related to cluster development and has been associated with pioneering projects on developing innovative clusters.

PROGRAM CONTRIBUTORS

Mr. Sridhar Venkataraman has a Master's degree in Engineering from Arizona State University after a bachelor's degree from BITS, Pilani. He has a rich and varied experience in software development in the Financial services industry for 17 years, with exposure to investment and retail banking areas in T. Rowe Price and i-flex solutions and online payments in PayPal, where he was the Senior Manager for the Global Platform, Core Payments, Infrastructure, Data Mining & Release Management teams during 2006-12. He has experience as a Faculty for BITS, Pilani delivering lectures for its MS Programs in Distance education in the areas of Computer Science, Project Management, Information Systems and Networking at HCL Cisco, Ashok Leyland, Virtusa and Aricent since 2007. His current interests include Social entrepreneurship and productivity training as well..

Mr. V.R. Vasudevan has a Bachelor's Degree in Chemical Engineering from BITS, Pilani. He has worked in the information technology industry for 23 years, working on both sides of the offshore-onsite model of software development, with eye for detail & quality, planning and organization, leading to repeat and consistent success. His long term ambitions include mentoring the next generation, giving them valuable inputs from both knowledge and experience, in order to build well-knit and skilled teams, who can grow and possibly turn out to be the entrepreneurs of tomorrow.

PROGRAM CONTRIBUTORS

Mrs. Karunambika Kumar completed her Bachelor's degree in Architecture from School of Architecture & Planning, Anna University and Master's degree in Architecture from Ball State University, Indiana, USA. As a graduate assistant she was actively involved in Inner City Revitalization programs as a part of the Housing Futures Institute headed by Dr. Stan Mendelson and funded by HUD. She worked with Architects Reed Reinvald, currently TCF Architecture in the Seattle Tacoma Area, focusing mostly in school design and renovation. Since returning to India she has worked on a number of residential and institutional projects including designs for school and college campuses.

Dr. Bala Balakrishnan received his Ph.D. from the Department of Chemical Engineering at the University of Texas at Austin in 1998. He is currently the Strategy Manager for Process Control at Freescale Semiconductor. Dr. Bala has 21 years of experience in the semiconductor industry putting the various aspects of Process Modeling, Control and Monitoring into practice.

HOW TO APPLY

HOW TO APPLY

For an individual to apply to the Technical Entrepreneurship program at TIPSGLOBAL, the following criteria should be satisfied:

- Successful completion of Grade 12 (XII standard) from any group including science and commerce
- Official records of completion of Grade 12 board exam under any of the following boards or equivalent:
  - State Board
  - CBSE
  - ISC
  - IB-DP (Diploma or Certificates)
  - Cambridge A-level
- Satisfactory performance in SAT or a SAT equivalent entrance exam conducted by **TIPSGLOBAL**
- Personal Statement for seeking admission at **TIPSGLOBAL**
- Satisfactory performance in a personal interview

SUBMITTING APPLICATION

Applications filled with relevant details and attachments can be sent to the following administrative office address or submitted online. The applications are available at www.tipstech.org

Administrative Office Address:

Director, Admissions,

School of Technical Entrepreneurship

TIPSGLOBAL INSTITUTE

47/2 Sathy Road, Saravanampatti,

Coimbatore - 641035

Apply online at www.tipstech.org

TIPSGLOBAL GREEN CAMPUS FACILITIES (ACADEMICS)

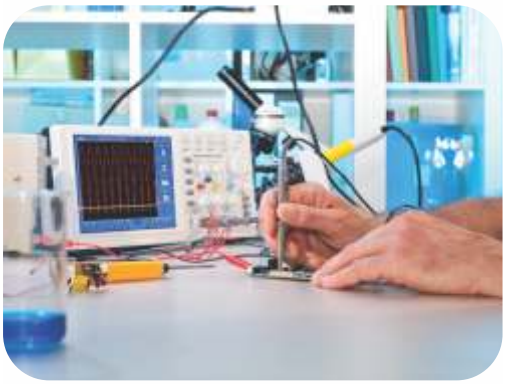
The TIPSGLOBAL Institute campus lies on a beautiful site, spread over 8 acres of land with landscaped areas and lush greenery. Laying great emphasis on the quality of student life on campus, TIPSGLOBAL combines elegant buildings and facilities amidst over 2000 trees and provides all amenities required for students during their course of study. At the heart of the campus is the Academic Centre, which houses Lecture Theatres, Technology Labs, Learning Resource Centre (LRC) and a Convention Centre.

Multi-Media Lecture Theatres

The lecture theatres at TIPSGLOBAL are equipped with a broadband communications network, which ensures global connectivity. Students can interact with faculty, industrial leaders and other students anywhere in the world through computerized video links. Presentation equipment including projectors, LCDs, computers, wireless headsets and touch pad systems, fixed cameras, video-conferencing setups and flexible seating configurations make the learning process of our students interactive and enjoyable.

Science and Engineering Labs

The Labs at TIPSGLOBAL institute are equipped with the latest tools, equipment and computer software used by today's engineering technologists on the job. They include science labs, computer labs, construction management labs, materials testing labs, computer-aided architecture and civil engineering labs and hands-on industrial engineering technology labs that facilitate application of productivity improvement principles like lean six sigma, ergonomics and value management. Students are provided with a wealth of learning opportunities where they can get first-hand experience in advanced areas like digital signal processing and robotics.



TIPSGLOBAL GREEN CAMPUS FACILITIES (ACADEMICS)

Library

The Learning Resource Centre (LRC), also known as the library, towers to the right of the Academic Centre. Students have direct access to various printed and electronic information resources in the LRC.Access to subscription databases, e-journals and e-books are provided to students through several workstations placed at the LRC. The open plan design of the interior of the LRCprovides attractive and light working spaces for students.

Convention Centre

Fully air-conditioned, and with a normal capacity of 800, the TIPSGLOBAL Convention Centre is designed as a multi-purpose conference area. Equipped with a configurable stage, it is ideal for plenary conference sessions and lectures, and can also be used for films and stage performances. It is fitted with a wide range of Audio Video equipment and lighting, including a 3D projector, LED Display Wall and a Surround Sound system.

Wi-Fi Enabled Campus

Recognizing the need and importance of the Internet in the field of education, the TIPSGLOBAL campus is a fully Wi-Fi enabled campus. This allows students to have uninterrupted Internet connectivity to access the web and exchange resourceful information from their wireless devices from anywhere in the campus.

TIPSGLOBAL GREEN CAMPUS FACILITIES (RESIDENTIAL)

3-Star Residential Accommodation

Individual accommodation is available for students who wish to stay on campus during their course of study at TIPSGLOBAL. The 3-star equivalent rooms are laid out as multiple residentialareas that are in close proximity to the lecture theatres, labs, LRC and the dining facility. Designed for individual stay with a suite of electronic equipment the rooms are air-conditioned and well furnished. They are spacious and airy with a full view of the lush greenery outside. Theseparate facilities for boys and girls, caring residential managers, tight security and the 24-hour power backup ensure a pleasant stay, allowing students to focus on their academics without compromising their social life.

Multi-Cuisine Food

Located very close to the hostel blocks, TIPSGLOBAL's on campus kitchen and dining facility provides multi-cuisine food choices to our students like Italian, Chinese and Indian. To promote healthy eating habits, our culinary team takes great care to provide balanced options in our dining facility.

Movie Theater and Video Games for Entertainment

The TIPSGLOBAL campus includes a movie theater with 3D Projection systems that is used for both education and entertainment. Also part of the campus is a video game arcade that gives our students an opportunity to unwind after a day of hard work.

TIPSGLOBAL GREEN CAMPUS FACILITIES (OTHER)

Multi-Sport Facility with Gym

The sports grounds are situated at a close distance from the hostel block to encourage students to stay fit by regularly playing their game of choice or by taking a simple refreshing run. The basketball courts are provided with floodlights to enable students to play till late in the evenings. The campus also includes a Gym with a variety of cardio and weight training equipment and an exercise area.

Open Amphitheater

The open-air amphitheaterwill be used for entertainment, performances and sports events. Equipped with full sound, lighting and special effects capabilities, they will take events to the next level. The amphitheater also serves as a popular venue for outdoor study and socializing. Shops and other facilities such as coffee shops, documentation centre, book store, mail room, and transport desk are located here.

Medical Support

TIPSGLOBAL has a full time medical staff and part time specialists in general medicine on premises. A team of qualified doctors is available on call to provide regular medical care to our students. In case of emergency, the student is immediately transported to a hospital via a college ambulance. TIPSGLOBAL has tied up with reputed hospitals that are in close proximity to the campus.

TIPSGLOBAL CAMPUS BIRD'S-EYE VIEW

Campus Address:

TIPSGLOBAL INSTITUTE
SF 361/1A, Karuvalur Road,
MG Chettipalayam, Coimbatore 641107.
(Close to TIPS CBE Main Campus)

“Cause change and lead; Accept change and survive; Resist change and die”

- Ray Norda, Chairman, Novell

i hear: i forget

i see: i remember

i do: i understand

- confucius

A 5-Year Integrated (Undergrad + Grad) Degree program in Technical Entrepreneurship

SCHOOL OF TECHNICAL ENTREPRENEURSHIP

TIPSGLOBAL INSTITUTE

Administrative Office Address:
47/2 Sathy Road, Saravanampatti, Coimbatore - 641035 Ph : +91 422 6477377
www.tipstech.org | info@tipstech.org

thearksquare.com