http://hkbk.edu.in/





2019 - 20



PROSPECTUS



C.M. Ibrahim

Founder Chairman

"The Future of our country depends on outlook and behaviour of our students. The graduates emerging from the portals of an educational institution should possess at least minimal moral values. A college is a platform to be model acceptable by the society. They should not only excel in subject matter, they should develop their traits and add value to life and should become a role model"



C.M. Faiz Mohammed

At HKBK college of engineering, our vision is based on hard work, dedication, discipline and determination with a strong emphasis on teamwork & shouldering high level of responsibility. This culture allows out students not only adopt themselves to the present day challenge but also accept individual responsibility to the family, society and nation.

The institute has set specific objectives and activity plans for achieving excellence in all areas of quality technical education. We strongly believe in achieving academic excellence through high standards in teaching, career guidance and moulding team players. At HKBK college of Engineering, we emphasise on creating technical competence and readily employable technocrats and managers for the corporate organizations.

The testimony is that the institution has emerged as a one stop destination for meeting the technical man power need of corporate of repute and the country's prestigious defense forces.



Dr. Muzzamil Ahamed Principal

"Every Student has hidden traits and in most of the cases it will be in a dormant state. It is the responsibility of the college to create an atmosphere wherein the students realizes their potential and exploit it to achieve excellence. It is here that we provide opportunities to develop technical skills and help students to achieve desired level of competencies, apart from their scholastic achievements and add new dimensions of substantive impact on their future career"

WELCOME TO THE WORLD OF TOMORROW



HKBK College of Engineering, the most sought-alter institution for technical education is located at Nagawara, about 7km from the heart of the Bangalore city. Acclaimed as one of the best-equipped institutions in the country. HKBKCE offers a range of degree courses in engineering for the young minds who desire to achieve technical knowledge, industry insights and soft skills. The institution has the curriculum as required by the University which includes well equipped labs, spacious classrooms, extensive library and separate hostel for boys and girls.

Our focus is to provide the best possible education that translates into a lifetime of learning. Each student is neither a face in the crowd nor a passive learner, individuality is recognized and groomed. We completely understand the purpose of providing quality education. At HKBKCE, this challenge is supported by a highly personalized approach to your education, your goals, your dreams and your needs take on new meaning and each one of us will be there to support you.

HKBKCE provides effective learning opportunities through its well qualified and committed staff. The conducive teaching and resources are enhanced by frequently upgrading our facilities towards a wider range of learning resources. The programs are designed to prepare students for an increasingly competitive job market. Besides, high-interaction with the relevant industries at all levels to ensure our graduates accquire skills for a great career and a successful life. These factors assure every HKBKCE graduate not only a degree but also an impressive resume.

HISTORY

HKBK College of Engineering was established in 1997 under the aegis of Karnataka State Muslim Fedration (KSMF) by Mr. C.M. Ibrahim a Former Union Minister (Ministry of civil aviation) & President KSMF.

CAMPUS PROFILE

Campus Area : 14 Acres existing Instructional Space : 2 Lakh + Square Feet Observed Holiday : As per Government/University Notification

UG Programs **Bachelor of Engineering**

- Computer Science & Engineering
- Information Science & Engineering
- Electronics & Communication Engineering
- Mechanical Engineering
- Electrical & Electronics Engineering
- Civil Engineering

Course Duration : 4 Years/8 Semesters : PUC-45% aggregate Eligibility : Physics, Mathematics, Chemistry/Bioloogy or its Equivalent course Subjects with English as one of the subject.

The candidate should have cleared K-CET/CET/KRLM/COMED-K/AIEEE Test.

PG Programs Master of Technology

- Computer Science & Engineering
- Electronics
- Machine Design*

Course Duration : 2 Years/4 Semesters Eligibility

: Admission to the Master of Technology Course shall be open to all the candidates who have passed B.E. / B.Tech. Examinations (in relevant field) of VTU or any other University/ institution or any other examination recognised as equivalent thereto.

The candidate should have cleared GATE or PGCET.

MBA- Masters of Business Administration (VTU) MB A- Masters of Business Administration (BU)

Course Duration : 2 Years/4 Semesters Eligibility : Bachelor's Degree in any discipline with an aggregate of 50%. inclusive of languages. The candidate should have cleared K-Mat/COMED-K/Mat/CAT/PGCET Test.

Research Programs

ECE, ME, EEE, MBA, CSE*, ISE*, Physics*, Mathematics*



COMPUTER SCIENCE & ENGINEERING

The Department of Computer Science and Engineering at HKBK College of Engineering (HKIBKCE) is recognized for its facilities and eminent faculty. The department works towards empowering students for professional and personal excellence. It has created a vibrant knowledge based environment which motivates students to explore new ideas and excel in academies.

The Department boasts of lab facilities that any student of this field might require. The well networked labs include internet facilities, the best computing hardware and peripherals and the latest software available in the market. The department regularly invites eminent personalities of various industries to conduct seminars and lectures. This helps students gain a better understanding of the current situation of the industry as well as gain information on varied topics ranging from latest trends to developments in the automation field.

The department also provides EDUSAT facility for students to keep abreast to the latest technologies via live sessions. With the best infrastructure available, the department motivates its students to think of innovative and unending possibilities in the field of Computer Science and transform these ideas into technological requirements of the industry, The department is committed to preparing graduates who are capable of contributing to development of computing technology.





Laboratories

Basic Computer/ Network Programming laboratory Data Structure/ Object oriented Programming lab Microprocessor laboratory Algorithms/Shell Script Computer Design laboratory Web Programming/Project laboratory Data Base Management System/ Computer Graphics and Visual Programming laboratory

Calculus and linear algebra **Engineering Physics** Basic electrical engineering Elements of civil engineering and mechanics **Engineering Graphics** Engineering Physics Laboratory Basic electrical engineering laboratory Technical English-I Advanced Calculus and numerical methods **Engineering Chemistry** C Programming for problem solving **Basic Electronics** Elements of Mechanical Engineering Engineering Chemistry Laboratory C Programming Laboratory Technical English-II

3rd Semester

Transform Calculus, Fourier Series and Nuerical Techniques Data Structures and Applications Analog and Digital Electronics Computer Organization Software Engineering Discrete Mathematical Structures Analog and Digital Electronics Laboratory Data Structures Laboratory Vyavaharika Kannada (Kannada for communication)/ Aadalitha Kannada (Kannada for Administration) Constitution of India, Professional Ethics and Cyber Law

4th Semester

Complex Analysis, Probability and Statistical Methods Design and Analysis of Algorithms Operating Systems Microcontroller and Embedded Systems Object Oriented Concepts Data Communication Design and Analysis of Algorithm Lab Microcontroller and Embedded Systems Lab

5th semester

Management and Entrepreneurship for IT Industry Computer Networks Database Management System Automata theory and Computability Computer Network Laboratory DBMS Laboratory with mini project

6th semester

Cryptography, Network Security and Cyber Law Computer Graphics and Visualization System Software and Compiler Design Operating Systems System Software and Operating System lab Computer Graphics Laboratory with mini Project

7th semester

Web Technology And Its Application Advanced Computer Architecture Machine Learning Natural Language Processing Cloud Computing And Its Application Digital Image Processing Unix System Programming Soft And Evolutionary Computing Computer Vision And Robotics Human Computer Interaction Storage Area Networks Machine Learning Laboratory Web Technology Laboratory With Mini Project Project Phase 1 + Seminar

8th Semester

Iot Technology Big Data Analytics High Performance Computing User Interface Design Network Management System Modelling And Simulation Internship / Professional Practise Project Work Phase II



INFORMATION SCIENCE & ENGINEERING





The lifestyle changes every day. These changes are one or other way made by the IT professionals. The Information Science and Engineering branch is thriving to provide such changes to make the life much easier today than yesterday. The faculty members of this department work together to achieve this goal to become reality. ISE department has got dedicated, motivated faculty members to produce their best efforts be transferred to the students. The knowledge and talent transformation process should be effective in this competitive world. The department achieve this goal through the faculty. Students are monitored and provided special training till the placements.

Faculty members closely monitor the progress of students and provides them additional coaching whenever required. One-to-one project guidance is provided to students by the faculty and continuous guidance is given to the students till the completion of the project. Apart from academics, students have been trained on soft skills to face the changing requirement of Industry. Experts from the industry are called to conduct various programs. Department conducts regular seminars and workshops in association with the industry to equip the students with practical insight into the corporate world and help the students to incorporate these technologies in their specialization.

Laboratories

Project Lab Programming Lab Web Programming Lab Database Application Lab Network Lab Microprocessor Lab

Calculus and linear algebra **Engineering Physics** Basic electrical engineering Elements of civil engineering and mechanics **Engineering Graphics** Engineering Physics Laboratory Basic electrical engineering laboratory Technical English-I Advanced Calculus and numerical methods **Engineering Chemistry** C Programming for problem solving **Basic Electronics** Elements of Mechanical Engineering Engineering Chemistry Laboratory C Programming Laboratory Technical English-II

3rd Semester

Transform Calculus, Fourier Series And Numerical Techniques Data Structures and Applications Analog and Digital Electronics Computer Organization Software Engineering Discrete Mathematical Structures Analog and Digital Electronics Laboratory Data Structures Laboratory Vyavaharika Kannada (Kannada for communication)/ Aadalitha Kannada (Kannada for Administration) Constitution of India, Professional Ethics and Cyber Law

4th Semester

Complex Analysis, Probability And Statistical Methods Design and Analysis of Algorithms Operating Systems Microcontroller and Embedded Systems Object Oriented Concepts Data Communication Design and Analysis of Algorithm Lab Microcontroller and Embedded Systems Lab

5th semester

Management and Entrepreneurship for IT Industry Computer Networks Database Management System Automata theory and Computability Professional Elective-1 Python Application Programming Computer Network Laboratory DBMS Laboratory with mini project Object Oriented Modeling and Design Social Network Analysis Advanced JAVA and J2EE Programming Languages

6th semester

Cryptography, Network Security and Cyber Law File Structure Software Testing Operating Systems Data Mining and Data Warehousing Python Application Programming Distributed Computing system Software Testing Laboratory File Structures Laboratory with Mini Project

7th semester

Web Technology And Its Applications Software Architecture And Design Patterns Machine Learning Natural Language Processing Cloud Computing and its Applications Information and Network Security Unix System Programming Soft And Evolutionary Computing Computer Vision And Robotics Information Management System Storage Area Networks Machine Learning Laboratory Web Technology Laboratory With Mini Project

8th semester

Internet of Things Technology Big Data Analytics High Performance Computing Modern Interface Design Virtual Reality System Modelling And Simulation Internship / Professional Practise Project Work Phase II



ELECTRONICS & COMMUNICATION ENGINEERING

Electronics and Communication Engineering is one of the most sought after branches of Engineering and Technology in the modern day. The department has an efficient and dedicated team of staff. The staff members meticulously plan, train and guide the students in their academic activities. We conduct counseling to identify the below average students and motivate them to achieve higher academic levels by conducting tutorial and additional coaching classes.

The department of E&C has 8 separate laboratories. We have Communication laboratory. Analog Circuits laboratory, Digital Circuits and Microprocessor laboratory and the Computer laboratory. The department encourages the students to take up innovative projects as a part of the VTU curriculum.

The department has technically equipped labs with the state of Art equipments and industry standard software tools. The digital library has an excellent collection of Books, Journals, Cds which is utilized by staff and students.





Laboratories

Analog Lab Project Lab - Avembys Incubation Centre Communication Lab Digital Lab Micro controller / Microprocessor Lab VLSI / HDL Lab Advance Communication Lab Power Electronics Lab

Calculus and Linear Algebra Engineering Physics Basic Electrical Engineering Elements of Civil Engineering and Mechanics **Engineering Graphics** Engineering Physics Laboratory Basic Electrical Engineering Laboratory Engineering Chemistry C Programming for Problem Solving **Basic Electronics** Elements of Mechanical Engineering Engineering Chemistry Laboratory C Programming Laboratory Language Laboratory –I (English) Advanced Calculus and Numerical methods Engineering Chemistry C Programming for Problem Solving **Basic Electronics** Elements of Mechanical Engineering Engineering Chemistry Laboratory C Programming Laboratory Language Laboratory -II (English) Advanced Calculus and Numerical methods Engineering Physics **Basic Electrical Engineering** Elements of Civil Engineering and Mechanics Engineering Graphics **Engineering Physics Laboratory** Basic Electrical Engineering Laboratory Language Laboratory -II (English)

3rd Semester

Transform Calculus, Fourier Series and Numerical Techniques Network Theory Electronic Devices Digital System Design Computer Organization & Architecture Power Electronics & Instrumentation Electronic Devices & Instrumentation Laboratory Digital System DesignLaboratory Vyavaharika Kannada (Kannada for communication)/ Aadalitha Kannada (Kannada for Administration) Additional Mathematics - I

4th semester

Complex Analysis, Probability and Statistical Methods Analog Circuits Control Systems Engineering Statistics & Linear Algebra Signals & Systems Microcontroller Microcontroller Laboratory Analog Circuits Laboratory Constitution of India, Professional Ethics and Cyber Law Additional Mathematics – II

5th semester

Management and Entrepreneurship Development Digital Signal Processing Verilog HDL Information Theory & Coding Professional Electives Nanoelectronics Switching & Finite Automata Theory Operating System Electrical Engineering Materials MSP430 Microcontroller Automotive Electronics Object Oriented Programming Using C++ 8051 Microcontroller DSP Lab HDL Lab

6th Semester

Digital Communication ARM Microcontroller & Embedded Systems VLSI Design Computer Communication Networks Cellular Mobile Communication Adaptive Signal Processing Artificial Neural Networks Digital Switching Systems Microelectronics Data Structures Using C++ Power Electronics (not for E&C students) Digital System Design using Verilog Embedded Controller Lab Computer Networks Lab

7th Semester

Microwave and Antennas Digital Image Processing **Power Electronics** Professional Elective-3 Multimedia Communication **Biomedical Signal Processing Real Time Systems** Cryptography CAD for VLSI DSP Algorithms and Architecture IOT and Wireless Sensor Networks Pattern Recognition Advanced Computer Architecture Satellite Communication Advanced Communication Lab VI SI Lab Project Work Phase-I + Project work Seminar

8th Semester

Wireless Cellular and LTE 4G Broadband Fiber Optics & Networks Professional Elective-5 Micro Electro Mechanical Systems Speech Processing Radar Engineering Machine learning Network and Cyber Security Internship/Professional Practice Project Work Seminar



MECHANICAL ENGINEERING

Mechanical Engineering is the only universal branch of conventional engineering the mechanical engineering department of this college is equipped with the state of the art machines and equipments in all the laboratories. The Department has foundry equipments for melting of materials which is used in research development of new metals. The department is also equipped with high end CAD/CAM and Solid Edge software and CNC Machines in its CAD/CAM Lab, which caters to academics, research and analysis.

A wide range of the latest state-of-the-art testing equipments ranging from testing of Mechanical properties of materials to the heat transfer to testing of fuels and engines, to testing of turbines and pumps are available in the department. The classrooms in the department confirm with the AICTE norms and are equipped with audio/visual aids. Our students are exposed to the latest software related to Mechanical Engineering application. The department also has an ISTE student's chapter under which lectures, seminars, workshops have been organized on latest trends and developments in the field of Mechanical Engineering. Some of the projects carried out by our students have brought laurels to the dedication, sincere and hard work of the students and faculty members.





Laboratories

Measurement and Metrology Lab Foundry Lab Energy Lab Heat and Mass Transfer Lab Machine Shop Material Testing Lab Metalographic Lab Auto CAD Lab Design Lab CAD/CAM Lab

Calculus and linear algebra **Engineering Physics** Basic electrical engineering Elements of civil engineering and mechanics **Engineering Graphics** Engineering Physics Laboratory Basic electrical engineering laboratory Technical English-I Advanced Calculus and numerical methods **Engineering Chemistry** C Programming for problem solving **Basic Electronics** Elements of Mechanical Engineering Engineering Chemistry Laboratory C Programming Laboratory Technical English-II

3rd Semester

Transform Calculus, Fourier Series and Numerical Techniques (Common to all Branches) Electric Circuit Analysis Transformers and Generators Analog Electronic Circuits Digital System Design Electrical and Electronic Measurements Electrical Machines Laboratory -1 Electronics Laboratory Vyavaharika Kannada (Kannada for communication) Aadalitha Kannada (Kannada for Administration) Constitution of India, Professional Ethics and Cyber Law

4th semester

Complex analysis, probability and statistical methods Power Generation and Economics Transmission and Distribution Electric Motors Electromagnetic Field Theory Operational Amplifiers and Linear Ics Electrical Machines Laboratory -2 Op- amp and Linear ICs Laboratory

5th semester

Management and Entrepreneurship Microcontroller(Core) Power Electronics(Core) Signals and Systems(Core) Estimating and Costing Renewable Energy Systems Microcontroller Laboratory Power Electronics Laboratory

6th semester

Control Systems(Core) Power System Analysis – 1(Core) Digital Signal Processing(Core) Electrical Machine Design(Core) Energy Audit and Demand side Management Computer Aided Electrical Drawing Sensors and Transducers Control System Laboratory Digital Signal Processing Laboratory

7th semester

Power System Analysis - 2 Power System Protection High Voltage Engineering Utilization of Electrical Power Testing and Commissioning of Power System Apparatus Laboratory Rely and High Voltage Laboratory

8th semester

Power System Operation and Control Industrial Drives and Applications Professional Elective – V Internship / Professional Practice Project Work Phase –II SeminarSeminar



CIVIIL ENGINEERING





The department has successfully completed a DST project in collaboration with the chemistry department and has published papers in Tier 1 journals and has gained strong hold on research capabilities. The department even has an Indian Patent to its credit. The department is continuously moving ahead with zeal of setting landmarks in innovation, service and research.



Seven batches of students have graduated from the portal leaving behind a trial of achievements, to summarize

Laboratories

Geology Lab Geotechnical Lab Concrete lab Environmental Lab Survey Lab

Calculus and linear algebra **Engineering Physics** Basic electrical engineering Elements of civil engineering and mechanics **Engineering Graphics** Engineering Physics Laboratory Basic electrical engineering laboratory Technical English-I Advanced Calculus and numerical methods **Engineering Chemistry** C Programming for problem solving **Basic Electronics** Elements of Mechanical Engineering Engineering Chemistry Laboratory C Programming Laboratory Technical English-II

3rd semester

Transform Calculus, Fourier Series and Numerical Techniques Strength of Materials Fluid Mechanics Building Materials and Construction Basic Surveying Engineering Geology Computer Aided Building Planning & Drawing Building Materials Testing Laboratory Vyavaharika Kannada (Kannada for communication) Aadalitha Kannada (Kannada for Administration) Constitution of India, Professional Ethics and Cyber Law Additional Mathematics - I

4th semester

Complex Analysis, Probability And Statistical Methods Analysis of Determinate Structures Applied Hydraulics Concrete Technology Advanced Surveying Water Supply & Treatment Engineering Engineering Geology Laboratory Fluid Mechanics and Hydraulic Machines Laboratory Vyavaharika Kannada (Kannada for Communication) Aadalitha Kannada (Kannada for Administration) Constitution of India, Professional Ethics and Cyber Law Additional Mathematics - II

5th semester

Design of RC Structural Elements Analysis of Indeterminate Structures Applied Geotechnical Engineering Computer Aided Building Planning and Drawing Air pollution and Control Railways, Harbours, tunneling and Airports Masonry Structures Theory of Elasticity Traffic Engineering Sustainability Concepts in Engineering Remote Sensing and GIS Occupational Health and Safety NCC Geotechnical Engineering Laboratory Concrete and Highway Materials Laboratory

6th semester

Construction Management and Entrepreneurship Design of Steel Structural Elements Highway Engineering Water Supply and Treatment Engineering Solid Waste Management Matrix Method of Structural Analysis Alternative Building Materials Ground Improvement Techniques Water Resource Management Environmental Protection and Management Numerical Methods and Applications Finite Element Analysis Software Application Laboratory Extensive Survey Project /Camp

7th semester

Municipal and Industrial Waste Water Engineering Design of RCC and Steel Structures Hydrology and Irrigation Engineering Design of Bridges Ground Water & Hydraulics Design Concept of Building Services Structural Dynamics Urban Transportation and Planning Prefabricated Structures Rehabilitation and Retrofitting of Structures Reinforced Earth Structures Environmental Engineering Laboratory Computer Aided Detailing of Structures Project Phase I +Project Seminar

8th semester

Quantity Surveying and Contracts Design of Pre Stressed Concrete Elements Earthquake Engineering Hydraulic Structures Pavement Design Advanced Foundation Design Internship/Professional Practice Project Work Seminar on current trends in Engineering and Technology



BASIC SCIENCES



Basic Sciences from a platform for the development of technology. The advancement in technology is a result of the intensive research & development in the different areas of basic sciences.

The department aims at impacting knowledge of different aspects of Basic Sciences useful in Engineering and Technology for the students of al engineering disciplines. In-depth knowledge of Basic-Science is of paramount importance in the learning of any branch of engineering and technology.

The Basic Science department staff always motivate the students towards greater attention and hard labour, which the subject demands. The upgrade of the department is an ongoing process in procuring the advanced apparatus and other necessary equipment as per VTU.

The Staff is constantly in touch with the latest developments in various fields of science & technology and imparts the same to the students. Most of our professors are associated with the research & development and have successfully published scientific papers. The department has successfully implemented week student support programs with excellent results. This has been a morale booster towards achieving academic excellence.

Laboratories

Chemistry Lab Physics Lab Basic Workshops CAED Lab CCP Lab English Lab



MASTER OF BUSINESS ADMINISTRATION

HKBKCE identified the need for management education due to the convergence of economics & technology and started offering MBA course of VTU in the year 2006. That is the milestone in its journey towards providing quality education. The programme combines management education with Indian values and to uses real time interaction with corporate for value added learning. Today's workforce responds to leadership that follows a coaching or mentoring model.

Successful leaders work with the aim of reflecting their innovative methods and unique vision. Keeping in tune with the above change, the department derived a teaching pedagogy that creates leaders for the next generation corporate world. The watch words are discipline, dedication and determination. In confirming with the mission, the department of management studies is imparting, short term compulsory value added courses.

Studying management at HKBKCE would offer students the best In strategic knowledge, industry insight, life skills and successful adaptation to real time business situations. The college has qualified and experienced faculty members committed to help students achieve their professional goals and success in any work environment.

The educational pedagogy ensures that the students come out confident. Enthusiastic and competitive to face the challenges of the corporate World.

1st semester

Management & Organizational Behavior ManagerialEconomics Accounting for Managers Business Statistics & Analytics Marketing Management Managerial Communication

2nd semester

Human Resource Management Financial Management Research Methodology Legal and Business Environment Strategic Management Entrepreneurship Development

3rd semester

Consumer Behavior Retail Management Services Marketing Banking and Financial Services Investment Management Direct Taxation Recruitment & Selection HR Analytics Compensation & Reward System

4th semester

Sales Management Integrated Marketing Communication Digital and Social Media Marketing Public Relations Organizational Leadership International Human Resource Management Mergers, Acquisitions & Corporate Restructuring Risk Management and Insurance Indirect Taxation

CO-CURRICULAR ACTIVITY













Certificate of Appreciation

This Certificate is presented to

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CO-CURRICULAR ACTIVITY









ACHIEVERS

Shambhavi A (1HK09EC094) from 8th semester ECE, VTU III Rank, 13th Annual convocation, May 2014, Dept. of Electronics and Communication Engineering



Department of Electronics and Communication Engineering, Secured 1st Rank in M.Tech (Electronics), and was awarded a Gold Medal in the 14th Convocation Function, VTU



Ms. Sameeha Ameer (1HK09IS036) from ISE awarded VTU III Rank in 13th Annual Convocation, May 2014, Dept. of Information Science & Engineering



CAMPUS RECRUITMENT





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