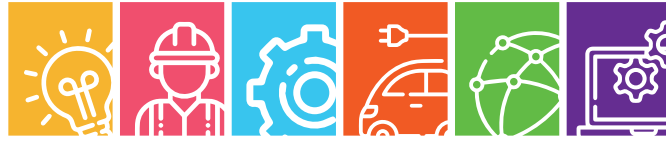


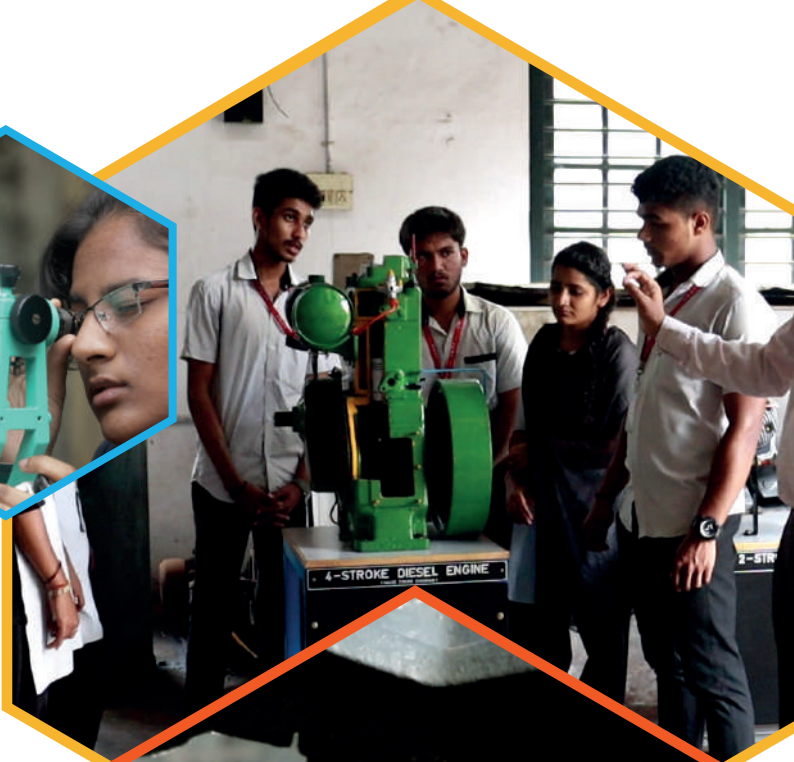
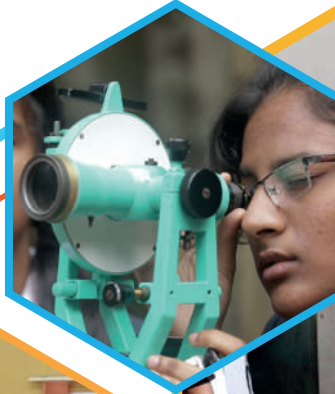


Government of Karnataka



**GOVERNMENT POLYTECHNIC**

DEPARTMENT OF TECHNICAL EDUCATION KARNATAKA

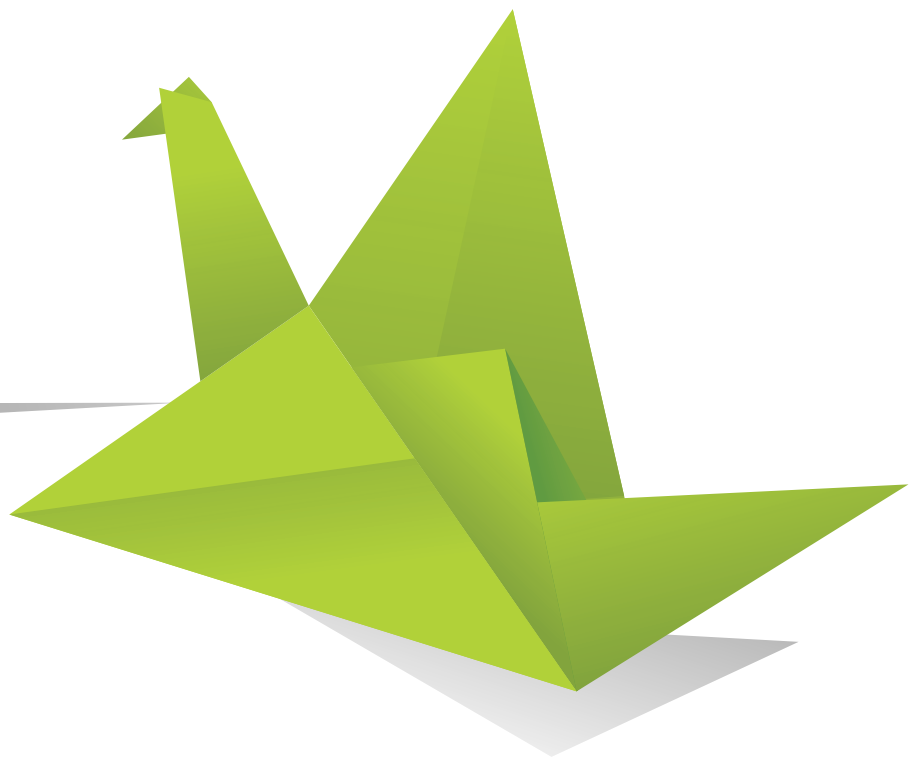


PROSPECTUS 2022-23

Explore the **New World** of  
**Diploma Education**



**GIVE  
WINGS TO  
YOUR  
DREAMS**



**Diploma Admissions 2022-23**



# DIPLOMA PROGRAM

2022-23



**Dr. C. N. Ashwath Narayan**

Hon. Minister for Higher Education

"The New National Education Policy encourages us to move from institution centric pedagogy to student centric pedagogy and we are proud that Karnataka will be the 1st state to adopt this paradigm shift by implementing the Karnataka LMS. We have also ensured the new curriculum supports technology in education, to enable student success at all times."



**Sri. G Kumar Naik**

Additional Chief Secretary  
Department of Higher Education

"The Department of higher education is committed to enhance access to education at your fingertips and students are provided with latest Tablet PCs to access their courses from anywhere, anytime. We are working closely with the industry to augment infrastructure across Polytechnics and ensuring students learn the latest in technology, so that they are job ready."



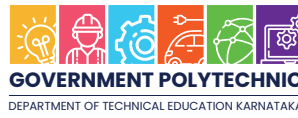
**Sri. Pradeep P IAS**

Commissioner  
Department of Collegiate and Technical Education

"Technical education has changed from the times I studied. Industry 4.0 is looking at new skills and job ready students. The New Diploma focuses on just that, to provide industry with skilled students, and also enabling students to choose their own career paths including entrepreneurship."

# DIPLIOMA PROGRAM

## 2022-23



**ಕರ್ನಾಟಕ**  
**LMS** ನಮ್ಮ ಶಕ್ತಿ  
ನಮ್ಮ ಭವಿಷ್ಯ  
ಕಾಲೇಜು ಮತ್ತು ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ



**Karnataka  
LMS**

**Industry ready  
Curriculum**

**Smart  
Classrooms**

**Tablet  
PCs**

# ಕರ್ನಾಟಕ LMS

ನಮ್ಮ ಶಕ್ತಿ  
ನಮ್ಮ ಭವಿಷ್ಯ

ಕಾಲೇಜು ಮತ್ತು ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ

Karnataka is the 1st state to implement a  
**Comprehensive Learning Management System**

Best of the **content** prepared by best of the  
**teachers**

For every 1 hour session – PPT, Video, Images,  
Animations & MCQs

**Daily assessment** of every student

Analysis of every student's strengths and  
weaknesses along with corrective action



# Smart Classrooms

Every Smart Class to have a Projector, White Board, UPS and Internet Facility

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Effective use of content provided in Karnataka LMS

---

Use of PPT, Video, Audio, Images and Animations to explain every subject to students in an easily understandable manner



# TABLET PCs

Distribution of Tablet PCs for effective utilization of Karnataka LMS and Smart Classrooms.



**Industry endorsed,  
NSQF & Internationally aligned**

**“ CURRICULUM ”**



# **Curriculum is key to your learning!**

**“ Pursue Higher Education globally and  
get direct admissions into associate or  
undergraduate degree programs offered  
by international institutions ”**



A Flexible Program that enables

# “ CAREER CHOICES ”

All Diploma Programs are structured for success, providing **flexibility of multiple exit & re-entry** and **pathways** that enable pursuing a career of your choice along with opportunities to change careers!

Build workplace skills, learn core discipline concepts and **choose your career path.**



**Employment**

**Higher Education  
& Research**



**Entrepreneur**

New Diploma Programs in

# “EMERGING AREAS”

Industry 4.0 seeks knowledge & skills in  
new emerging areas



Cyber Security



Food Processing  
& Preservation



Travel and  
Tourism



Alternative Energy  
Technology



Automation &  
Robotics



Cloud Computing  
& Big Data



Electrical  
Engineering and  
Electric Vehicle  
Technology



Gaming and  
Animation

# INDUSTRY 4.0

# Diploma in Mechanical Engineering



## About the Program

The Diploma in Mechanical Engineering is one of the oldest disciplines with a rich history of Engineers who have graduated across Polytechnics in Karnataka. Graduates have either joined industry after Diploma or pursued higher education, either pathways have led them to become industry leaders. Times have changed since, with the advent of technology, today Mechanical Engineers are expected to be conversant with not just their discipline, but also other disciplines to be able to succeed in their careers. Keeping this in mind, the Department of Technical Education has developed a new C20 curriculum in partnership with industry that enables students to become employees, engineering researchers or employers.

The program provides broad-based and diverse engineering training in areas such as material science, solid and fluid mechanics, instrumentation and control, product and system design and manufacturing. You will be trained for a variety of engineering roles, in industries ranging from Automotive, Mechanical, Manufacturing, Engineering design and development.



## Program Highlights

- Mechanical Engineering is the core of most engineering courses. You will get to apply your knowledge and skills to almost every other engineering discipline easily.
- Choose your career pathway of becoming an employee, a researcher or an employer.
- In the employment pathway, develop depth of knowledge in one of the following 4 (four) specialisations; **Automation & Robotics, Advanced Manufacturing, e-Mobility and Applied Thermal Engineering**. This will be followed by industry exposure through a structured 16 weeks internships or an industry project in the specialised subject area.
- You will gain advanced standing in mechanical engineering degrees at local universities and overseas higher education institutions.

### Alumni Speaks

“Mechanical Engineering is a fantastic curriculum that equips you with enough skills and knowledge needed to venture into any field of engineering you choose either to be an employer or employee.”

**Mr. Maharudra, Scientific Assistant – BARC Mumbai**

# Diploma in Electronics & Communication Engineering



## About the Program

Electronics is part of every advanced product nowadays, whether it is for communication, data storage and processing, household electronic appliances, electronic games, biomedical devices etc., with each containing one or more sub-components and microsystems that are fabricated using electronic technology. It has transformed into a field that inevitably made humans and their lives smart, effective and efficient and is the backbone of modern communication. The Diploma in Electronics & Communication Engineering has a flexible curriculum that helps you build your technical knowledge, with ample hands-on practical sessions and projects to hone your problem solving and practical skills. You are trained to keep operations running smoothly and assist with the development, testing, and production of such things as circuit boards, wireless phones, PDAs, medical equipment, and control systems.

The Program offers a broad based and before diverging training in the areas like Analog and Digital Electronics, Logic Design, Wired and Wireless communication, Embedded System graduates with you job before opportunities, Industrial Automation. Graduates will have opportunities in Electronics & Communication and in other sectors such as IT, Computer management of both hardware and software, manufacturing and automation.



## Program Highlights

- Today's highly-automated workplace has elevated productivity to new levels. Advanced systems are anchored by an array of electrical and electronic equipment. Choose from one of the many specialisations offered that include **IoT, VLSI and Embedded System, PCB Design & Fabrication, Medical Electronics** or any other specialisation as offered by the Polytechnics you have enrolled.
- You learn how to set up, maintain, and troubleshoot various electronic equipment available in your institution. Working with systems, you can develop electronics, mechanics, and networking skills by solving problems together.
- 16 weeks Internship Programme in the area of specialisation at reputable organisations to apply your classroom learning into real projects along with also learn and develop professional skills needed to be absorbed into employment.

### Alumni Speaks

"Turn your passion into a professional path forward if you're fascinated by the use of electronic and computer devices to communicate, create, transport and entertain."

**Mr. Shivaraj, Software Engineer – KPIT Automotive**

<https://dtetech.karnataka.gov.in/kartechical/>

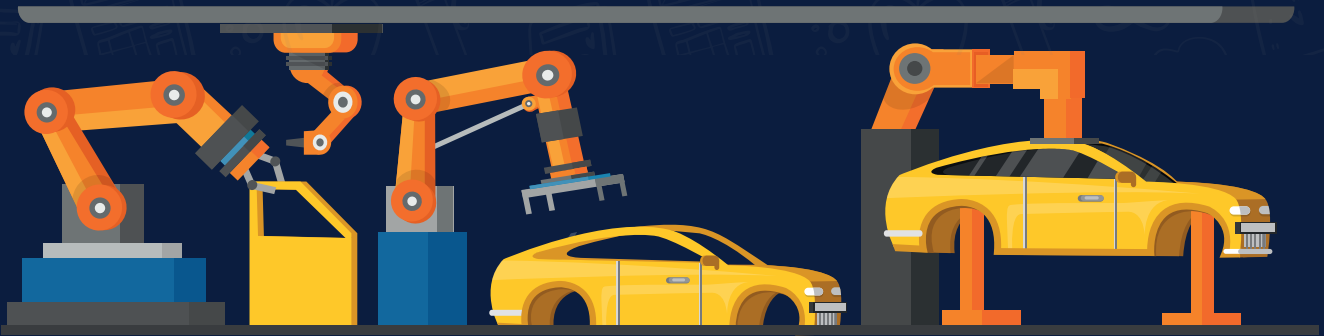
# Diploma in Automobile Engineering



## About the Program

The Diploma in Automobile Engineering combines the latest in workplace skills needed, a strong core coursework, specialisations in automotive technologies and relevant industry internships to prepare you for successful careers in the automotive manufacturing and services industry. You will acquire important skills related to design, manufacturing, diagnosis and repair of modern automobiles. With the latest technologies like hybrid or electric vehicles entering the Indian market, the demand for automobile engineers in design, manufacturing and maintenance will increase as the number of automobile companies also coming to Karnataka grows.

The program teaches you design of engines, vehicle bodies, manufacturing of automobiles, remodelling and maintenance of an automotive such as motor-cycle, cars, buses, trucks and other transportation vehicles. You also learn mechanical, electrical, electronics, safety engineering and software used in modern automobiles. Graduates are employed in a variety of positions including auto sales and service, dealership service manager, automatic transmission and general service technician, insurance appraiser and other job roles.



## Program Highlights

- The new curriculum helps you develop understanding of operational principles, service sequences and diagnostic techniques for an automobile and upon completion you will be ready to take on entry-level positions in the automotive industry dealing with development, testing, diagnosis and service of mechanical, hydraulic, electrical and thermodynamic automobile systems.
- Choose from one of the many specialisations offered that include **Electric Vehicles, Farm Machinery, Construction and Earth moving Equipment and Lean Quality Management System** or any other specialisation as offered by the Polytechnic you have enrolled.
- Change your specialisation by re-enrolling into the final year of the Diploma program, if you are not happy with the kind of job profile in the specialisation you have completed.
- 16 weeks Internship Programme in the area of specialisation at reputable organisations where you not just apply your classroom learning to real projects but also learn and develop professional skills needed to be absorbed into employment.

### Alumni Speaks

“As EV market grows and more manufacturers like TESLA set up shop in Karnataka, students studying the new Diploma curriculum with a specialisation in EV shall be sought after by industry.”

**Mr. Bhaskar. G, Deputy Manager – Toyota**



## About the Program

Curious about how cities are designed and built? Want to build sustainable smart cities that meet aspirations of tomorrow's society? Keen to make a difference in lives of individuals, society & civilized world as a whole? If your answer is "Yes!", then Civil Engineering is a career path you should consider. Diploma in Civil Engineering enables your learning across the value chain of infrastructure, such as buildings, highways, skyscrapers, bridges, airports, railways etc., in design, construction and maintenance of projects. As a Civil Engineer, you will be responsible for ensuring all works are done in a professional and ethical manner, and more importantly, safe for use or living.

Karnataka's construction demand is expected to get stronger with upcoming large and complex projects. The built environment sector is looking to be more productive and competitive by leveraging technologies and emerging trends. If you want to 'Build SMART, Build EFFICIENTLY & Build GREEN', the Diploma in Civil Engineering will equip you with skillsets needed by the construction industry.



## Program Highlights

- The new C20 Curriculum prepares to be life-ready, work-ready and world-ready. It equips you with skillsets that are aligned with the Construction Industry.
- Choose one of the many specialisations offered that include **Structural Engineering; Sustainable Built Environment; Infrastructure Engineering; Net zero Buildings** or any other specialisation as offered by the Polytechnic you have enrolled.
- Change your specialisation by re-enrolling into the final year of the Diploma programme, if you are not happy with the kind of job profile in the specialisation you have completed.
- 16 weeks Internship Programme in the area of specialisation at reputable organisations where you not just apply your classroom learning to real projects but also learn and develop professional skills needed to be absorbed into employment.

### Alumni Speaks

"The C20 curriculum is tailor made to fit current industry requirements and the inclusion of technology will help students to be better prepared for the practical world."

**Mr. Preetham Kumar KG, Sr. General Manager-CBRE**

# Diploma in Computer Science & Engineering



## About the Program

Karnataka is striving to become a "Smart State", and many cities in this state are racing towards becoming Smart Cities. You will see electric vehicles roaming on the roads; drones delivering orders; Intelligent City Management Systems, etc. Do you have the knowledge and skills in these areas, tapping on these trends to achieve great success in your career? With a plethora of applications in diversified domains, computational systems have become integral part of every engineering solution. "Computer Science & Engineering" is a discipline that deals with design, implementation, and management of computational systems. Diploma in Computer Science Engineering is the course that you can gain knowledge and skillsets for emerging trends to develop secured smart solutions with intelligent devices for innovative info-communication service.

The Diploma in Computer Science & Engineering is the most comprehensive diploma-level computing course which will equip you with a solid foundation in Programming, Algorithms, Computer Hardware and Networking, Database systems, Linux and Windows administration and Software engineering. These skills & knowledge will empower you to take up the challenges of this digital age.



## Program Highlights

- Curriculum alignment with industrial certifications such as CCNA, CompTIA Cloud Essentials, CCNA Security / CompTIA Security+, CCNA Cyber Ops to enhance your career prospects.
- Choose from one of the many specialisations offered that include **Cloud Computing; Data Science; Cybersecurity; AI & ML** or any other specialisation as offered at the Polytechnic you have enrolled.
- Change your specialisation by re-enrolling into the final year of the Diploma programme, if you are not happy with the kind of job in profile the specialisation you have completed.
- 16 week enhanced internship programme at reputable companies to deepen your skills and provide you with exposure to real world projects.

### Alumni Speaks

"The industry certified curriculum along with the depth of learning a specialised subject leading to internship or project shall help you solve real world problems and be ready for future challenges."

**Ms. Tejashwini, Software Developer – Bosch**

<https://dtetech.karnataka.gov.in/kartechical/>

# Diploma in Electrical and Electronics Engineering



## About the Program

The Diploma in Electrical & Electronics Engineering aims to train engineers with a broad-based engineering education to support a wide range of electrical and electronic industries. Rapid advancement in technology has changed the scenario in generation, transmission and distribution of power. Students will build up their technical knowledge, with ample hands-on practical sessions and case studies to hone their problem solving and practical skills. The new curriculum imparts workplace skills to students, that transform them into trained and qualified personnel ready to be a part of industrial manpower. Graduates can propel their engineering career in an array of industries including power, transmission & distribution, power electronics, process automation, energy management, etc.

The program provides broad-based and diverse engineering training in areas such as electrical machines, transmission and distribution, switchgear and protection, power electronics, computer aided electrical drafting and industrial automation. Designed as a skill enabled program, the students actually learn by doing and progress from basics to higher order skills like installation, maintenance and troubleshooting of electrical equipment.



## Program Highlights

- A core branch of Engineering which is always recognized as an ever-green branch, you will get to apply your knowledge and skills to almost every other engineering discipline easily.
- Choose from one of the many specialisations offered that include **Power Engineering, Renewable Energy, Industrial Automation, and Industrial Electrician** or any other specialisation as offered by the Polytechnic you have enrolled.
- Change your specialisation by re-enrolling into the final year of the Diploma programme, if you are not happy with the kind of job profile in the specialisation you have completed.
- 16 weeks Internship Programme in the area of specialisation at reputable organisations where you not just apply your classroom learning to real projects but also learn and develop professional skills needed to be absorbed into employment.

### Alumni Speaks

“ The new curriculum is designed keeping in mind the ever-changing technology which will equip the students to be industry ready soon after completion and empower them in building a strong career and even stronger nation.”

**Mr. Pavan S D, Managing Director– Plant Supervision India Pvt Limited, Bangalore**



# Diploma in Ceramics Engineering

## About the Program

Ceramic engineering is the science and technology of creating objects from inorganic, non-metallic materials. This is done either by the action of heat, or at lower temperatures using precipitation reactions from high-purity chemical solutions.

The program provides you with a broad-based and diverse insights into the various fields of ceramics both traditional and advanced ceramic materials, which finds applications in the field of Electronics, Nuclear Science, Aerospace, Medical, Automobiles, and much more. Ceramic engineer can find jobs in various production industries as Ceramic Technologist, Ceramic Designer and Marketing Executives.



## Program Highlights

- Ceramic engineering is a unique area of high specialisation and multidisciplinary, often working at the intersection of two fields such as materials and electronics or construction or biomedicine. This includes the intersection of material families, such as metals and ceramics.
- You can learn the complete process starting from raw materials used to refraction, manufacturing and its application in various industries.
- You can pursue under graduation in ceramics or business and continue to become a researcher or scientist in ceramics.

# Diploma in Chemical Engineering

## About the Program

The Diploma in Chemical Engineering helps you conceive and design processes to produce, transform, and transport materials—from experimentation in the lab to full-scale production. This program provides broad based and diverse engineering training in the areas such as applied mathematics, material and energy balances, thermodynamics, fluid mechanics, energy and mass transfer, separations technologies, chemical reaction kinetics, and reactor design, and process design.

Student will be trained for a variety of engineering roles, in industries ranging from manufacturing, engineering design and development.



## Program Highlights

- You will be exposed to real-world industry projects & internships that provides you with industry relevant experience and working on meaningful projects with our industry partners.
- You can choose to specialise in Petroleum technology, Instrumentation and process control sector, petrochemical technology, chemical technology.
- Explore careers beyond the traditional in chemical, energy, and oil industries, chemical engineers can now enter into fields of biotechnology, pharmaceuticals, electronic device fabrication, and environmental engineering.

# Diploma in Civil Engineering (Environmental)

## About the Program

Environmental civil engineers need to ensure societal development and the use of natural resources like water, land and air are sustainable. They help design sustainable solutions that address global environmental challenges by ensuring that environmental pollution and degradation are minimized.

They build and improve on the infrastructure and systems underpinning modern life, ensuring a better tomorrow for our environment and future generations. The program provides you training in civil engineering along with environment covering waste management, water supply, hydraulics, pollution monitoring and control, sanitation, water resources, ecology and microbiology



## Program Highlights

- The program focuses on developing the knowledge and skills required for environmentally sustainable construction.
- You shall be eligible to apply for jobs in pollution control boards, water supply boards, city corporations, municipalities and any industry which mandatorily requires treatment plants.
- You can pursue under graduation in civil or environmental engineering.

# Diploma in Mechatronics Engineering

## About the Program

The Diploma in Mechatronics will equip you with knowledge in mechanical engineering, electronics and programming to design and build intelligent systems. With the emergence of Advanced Manufacturing and Industry 4.0, the course offers diverse field training in areas like materials science, fluid mechanics, digital systems and control, product and system design and manufacturing science.

A program that equips graduates with relevant skillsets including engineering skills like inspection, problem analysis and also help you in building a mind set to solve solutions beyond disciplines.



## Program Highlights

- Enables you to be Future Ready by empowering you with a combination of Interdisciplinary Skillsets and Multidisciplinary Mind set.
- You will be exposed to real-world industry projects & internships that provides you with industry relevant experience and working on meaningful projects with our industry partners.
- You can choose from multiple pathways to local and overseas institutions of higher learning leading to exciting career opportunities in various industries and sectors in India or abroad.

# Diploma in Mechanical Engineering (Welding & Sheet Metal)

## About the Program

Welding & Sheet Metal are important job skills for Mechanical Engineers. It is very essential in Industrial infrastructure development such as erection, commissioning, shipping, power plants, steel plants, cement plants etc.

The program teaches you the foundation in mechanical engineering along with knowledge and skills in TIG welding, MIG welding, Spot welding, sheet metal fabrication, press tools, metal finishing, electroplating, solid and fluid mechanics and Non-destructive testing. You will be ready to take on roles in industries ranging from Fabrication, Automotive, Manufacturing, Quality control, CNC and Metal finishing.



## Program Highlights

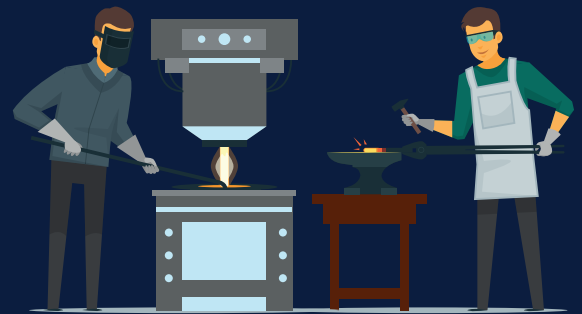
- Welding and Sheet Metal is an allied program of mechanical engineering, with more focus on workshop training or hands on experience in welding & fabrication equipment, safety, plant technologies etc.
- You will have opportunities to intern with leading industries across Karnataka as all manufacturing industry needs welding and sheet metal skills.
- You can choose to become an entrepreneur by exploring opportunities to establish your own metal fabrication shop with help from the Government.

# Diploma in Mechanical Engineering (Heat Power Technology)

## About the Program

Heat Power Technology is another key area of specialisation in mechanical engineering that focuses on building knowledge and skills in Thermal (Heat power) engineering and Technology, Refrigeration, HVAC and Fluid power sciences. This Diploma program teaches you foundation in mechanical engineering along with knowledge in materials science, heat engines and automotive engineering, fire safety engineering and advances in manufacturing technology.

You will be ready to take on roles in industries ranging from HVAC, Automotive, Mechanical, Manufacturing, Engineering design and development.



## Program Highlights

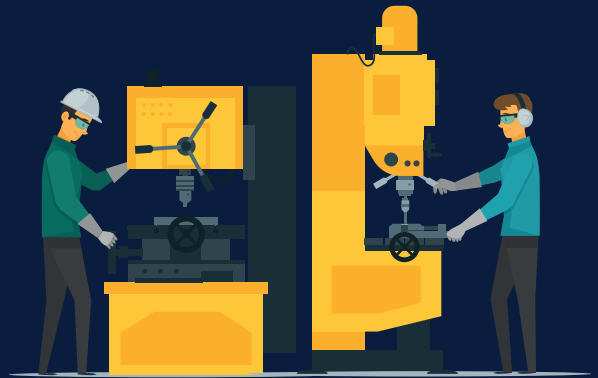
- Heat Power Technology is an allied program of mechanical engineering, with focus in analysis and design of critical components and systems linked to thermal and mechanical energy conversion.
- Beyond the usual mechanical engineering jobs, you can also look to renewable energy jobs where you can focus on improvement in energy efficiency to develop innovations in transportation on roads and in air and space.
- You can choose to become an entrepreneur by exploring opportunities to establish your own renewal energy business or offer engineering services in HVAC, Refri geration, etc.

# Diploma in Mechanical Engineering (Machine Tool & Technology)

## About the Program

Machine tools play a vital role in enabling manufacturing companies in advanced industries to develop components and products to the highest possible specifications and is the basis for precision manufacturing. This Diploma program teaches you foundation in mechanical engineering along with knowledge in machine design, metrology, machine tool design, press tools, machining, pneumatics, power & plant engineering, micro-electro-mechanical systems, CNC and SQC.

You will be ready to take on roles in industries ranging from machine tool design, tool room management, manufacturing, design and development.



## Program Highlights

- Machine tool technology is an allied branch of mechanical engineering and encompasses several skill areas, such as CNC, drill press, lathe, milling machine, and grinding operations.
- Beyond the usual mechanical engineering jobs, you can also look to jobs where you can focus on design and development of various machine tools needed for various manufacturing applications.
- You can choose to pursue higher education in precision engineering that could include advanced CNC machining, mould design, digital fabrication or even tooling engineering.

# Diploma in Mechanical Engineering (Instrumentation)

## About the Program

Instruments play a very important role in any discipline of engineering and with the advent of technology most mechanical instruments incorporate electronics which thus needs a very good understanding of periodic testing and calibration. The program provides you with a broad-based and diverse engineering training in areas such as designing software, industrial instrumentation, engineering metrology, instrumentation and control, design of instrument elements and manufacturing.

You will be trained for a variety of engineering roles in industries ranging from Automotive, Mechanical, Manufacturing, Instrumentation Engineering design and development.



## Program Highlights

- Instrumentation is an allied program of mechanical engineering, with an interdisciplinary focus on mechanical and electronics to develop and maintain measuring instruments.
- Beyond the usual mechanical engineering jobs, you can also look to roles that include measurements, calibrations, testing and quality.
- You can choose to become an entrepreneur by exploring opportunities to establish your own instrumentation testing and calibration laboratory.

# Diploma in Metallurgical Engineering

## About the Program

Metallurgical engineering is the study of metals and how metals can be safely transformed into products that benefit humanity – things such as implants, computer chips, cars, materials for space, and more. The Diploma program provides you training in areas such as materials science and manufacturing, iron and steel making, powder metallurgy and joining of metals, foundry technology, fuels and refractories and metallography.

You will be trained for a variety of roles in industries ranging from automotive, ferrous and nonferrous, manufacturing of iron and steel, testing of metallic and materials in engineering industry.



## Program Highlights

- As a metallurgical engineer you will conduct testing of materials to; ensure safety and sustainability; recycling of materials; material failures, and testing procedures to ensure materials can withstand extreme environments.
- You can get jobs in steel, mining, automobile, aerospace, security, recycling, material engineering and processing, and sustainable design industries.
- You can pursue under graduation in Metallurgical Engineering and continue to become a researcher or scientist in metallurgy.

# Diploma in Polymer Technology

## About the Program

Polymer Technology includes manufacturing, processing, analysis and application of long chain molecules. Polymers typically include adhesives, foams, plastics, paints, rubber, sealants, varnishes, etc. Today, Industries that are totally dependent on polymers include information technology, aerospace, music, clothing, medical, motor manufacturing, building, packaging, and many more.

The Diploma program provides you training in handling and operation of equipment's used in polymer processing for rubber, plastic, composite material, mechanical operations, Chemical testing, analysis, etc. You will be the able to take up roles in production, production management, quality or marketing.



## Program Highlights

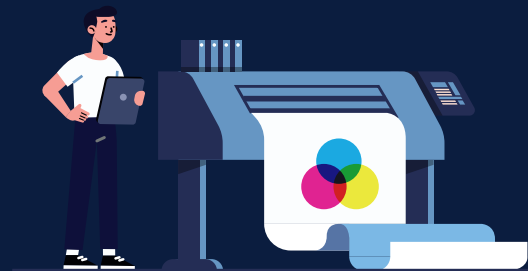
- A Polymer Technologist is an applied scientist who has a diverse scope of opportunities in the technical divisions of companies who do design and manufacture products using polymer mixtures.
- You can get jobs in a motor-manufacturing or related supply and service industries especially in the paint, tyre and plastic-component industries.
- You can pursue an entrepreneurial career by setting up your own business for manufacturing polymeric goods such as moulded plastic or rubber articles.

# Diploma in Printing Technology

## About the Program

Printing is a process to produce a picture or text by applying different methods like inked type, blocks, plates and printing technology is about understanding printing press operations, design and creation of printed materials. The Diploma program provides broad-based and diverse engineering training in areas such as Printing Materials science, Graphic Designing, Image Carrier Preparation, Printing Machines Operational Process, Packaging, Binding and Finishing Operations, Quality Control.

You will be trained for a variety of engineering roles that include Printing supervisor, Engineer–screen room printing, Printing engineer, Finishing worker, Digital press operator, Desktop technician, etc.



## Program Highlights

- A printing technologist designs concepts for which he/she has multidisciplinary capabilities especially in art and technology and is expected to have deep knowledge and skills in printing machinery, basic electronics, software.
- You can get jobs in industries ranging from graphic designing, printing, digital, advertising, security printing, publishing and packaging.
- You can pursue under graduation in printing technology leading to research in printing technology or become an entrepreneur.

# Diploma in Apparel Design & Fabrication Technology

## About the Program

Apparel Design and Fabrication Technology is a job oriented course that combines the art of design and the selection of the cloth and fibres that are meant to preserve the aesthetics of clothing and design. The Diploma program trains you in fashion designing, pattern making, garment construction, surface ornamentation (hand embroidery, machine embroidery, fabric painting), knitting, fashion merchandising, textile designing, textile testing, computerized pattern making and grading.

You can work in the industry as assistant merchandiser, quality controller, supervisors or venture out as an entrepreneur and open your own boutique.



## Program Highlights

- Apparel design and fabrication focuses on making you excellent craftsman along with knowledge in textile making, design production and marketing
- As an apparel designer you will be responsible for creating original clothing, accessories, and footwear with designs that appeal to consumers. You may also be required to work with other designers or team to develop prototype designs in industry.
- You can pursue under graduation in Apparel Design or become an entrepreneur or a design practitioner.

# Diploma in Commercial Practice

## About the Program

Commercial Practice is a practice that plays an important role in assisting a company's administration in ensuring its compliance with statutory and regulatory requirements. The key role is to assist a company to appropriately implement the decisions of its Board of Directors.

The Diploma in Commercial Practice program provides you training in accounting and auditing, taxation, secretarial skills, communication skills, office administration and management, company and business Law, computer skills in DTP and the use of accounting packages like Tally used by companies.



## Program Highlights

- The program helps you build a strong foundation in the functioning of corporate undertakings.
- You can study the program in either English or Kannada and you shall be eligible to apply for jobs not just in companies but also in banking institutions, state and central governments where you can perform jobs ranging from stenographers or personal assistants to administration managers.
- You can pursue under graduation in commerce or business.

# Diploma in Library & Information Science

## About the Program

Technology has changed the way we acquire, search and disseminate knowledge and hence libraries have today evolved with Information Science enabling effective and efficient knowledge management, which has also enabled corporate to manage knowledge and innovation better. The Diploma program provides training in areas such as collection development and management, information research methods, information management systems, cataloguing and classification, statistics and management, reference, preservation and archiving.

You will be trained for a variety of roles within a library including circulation manager, cataloguer, preservation and archives supervisor.



## Program Highlights

- A Librarian is expected to be an information specialist, a go to person for CEOs, Subject Experts, Researchers, academicians, or any seeker of knowledge or information about their place of work or beyond.
- You can get jobs in academia, industry, government, museum, galleries, research centres, courts, etc. and take up roles of junior librarian, assistant librarian, records manager, junior information analyst, manuscript librarian, etc.
- You can pursue under graduation in library and information sciences.

# Diploma in Alternative Energy Technology

## About the Program

Have an interest in making a career the environment and sustainability? The Diploma in Alternative Energy Technology is your best choice as it will equip you with knowledge in mechanical and electrical engineering needed for building alternative energy technologies. The alternative energy industry has seen impressive growth over the last decade, and both mechanical and electrical engineers have played a key role in enabling our transition to clean energy and more sustainable practices.

A program that equips graduates with relevant skillsets including fundamentals of alternative energy, power electronics, fuel cells and hydrogen, solar and wind energy generation, biofuels and biomass energy.



## Program Highlights

- "Green" jobs in the renewable-energy industry are in high demand and is expected to so through till 2026. Wind-turbine technicians and solar panel installers are the fastest-growing jobs in the country says Business Insider, India.
- You can design machines and devices to harness energy efficiently, design and build solar energy systems including parts such as solar panels, study further to become a researcher or consultant where you can examine ways to improve energy extraction projects to make them efficient and environmentally friendly.

# Diploma in Automation & Robotics

## About the Program

Automation and Robotics deals primarily with the automation of manufacturing, quality control and material handling processes. This includes understanding the use of general purpose controllers for industrial processes including PLCs, stand-alone I/O modules, and computers to replace manual command-response activities into mechanized equipment and logical programming commands. This includes both machine vision to enable automatic inspection as well as robot guidance functions.

A program that equips you with understanding equipment specifications, design, and installation and troubleshooting of automation systems. The typical jobs are available in small to large manufacturing and support, automotive manufacturing, entertainment, medical, food and beverage processing and packaging, pharmaceutical industries including working independently as automation consultants.



## Program Highlights

- Enables you to be Future Ready by empowering you with a combination of Interdisciplinary Skillsets and Multidisciplinary Mind set.
- You can perform jobs like controls Engineer, maintenance Engineer, robotic Engineer, PLC programmer, automation specialist or supervisor or system engineer.
- You can also pursue under graduation in Mechanical, Electronics, Instrumentation and go all the way to become a robotics scientists or researcher. You can also pursue higher education internationally in advanced manufacturing undergraduate programs.



# Diploma in Cloud Computing & Big Data

## About the Program

Cloud computing is a platform to provide computing related solutions (such as; store, manage and data processing) to the user, from anywhere in the world and wherever user needs. The program gives you an understanding of cutting edge technologies, applications and virtualisation of cloud computing, along with becoming familiar with cloud providers.

Learn beyond Statistics & Analysis with focus on Big Data as a collection of large and complex data sets and the challenges of capture, curation, storage, search, sharing, and visualisation. You will also learn a range of enhanced virtualisation deployment, cloud computing and big data theory along with knowledge of open source and vendor specific virtualisation solutions.



## Program Highlights

- Curriculum alignment with industrial certifications in cloud computing to enhance your career prospects.
- Choose from one of the many specialisations offered that include Cloud Architect, Cloud Engineer, Big Data Engineering and Big Data Analytics or any other specialisation as offered at the Polytechnic you have enrolled.
- Big Data Engineering includes design, deployment, acquiring and maintenance (storage) of large amount of data. Big Data Analytics includes understanding the concept of utilizing the large amounts of data from systems.

# Diploma in Food Processing & Preservation

## About the Program

The food industry has the best potential for growth and income generation post pandemic, and not just reduce the burden on the agricultural sector but also support it with efficient management of their produce. The Diploma in Food Processing and Preservation trains you in understanding the various concepts in food science and technologies that are used today by industry to transform raw ingredients into food, preservation, packaging, canning and distribution of end products to the market.

You will be able to work both in public and private sectors engaged in food processing, catering companies, food research institutions or companies, and fast food restaurants chains.



## Program Highlights

- Food processing and preservation is the branch of Food Science, where a set of techniques and methods are used to change the raw ingredients into prepared food that is preserved for consumption later. This has applications in fruits & vegetables Processing, fisheries, milk & milk products, meat & poultry, alcoholic beverages & soft drinks and grain processing.
- You can also pursue under graduation in Food Sciences and go all the way to become a food scientists or researcher. You shall also have opportunities to become an entrepreneur in the food processing and preservation business.

# Co-curricular & Extra Curricular Activities



NCC



NSS



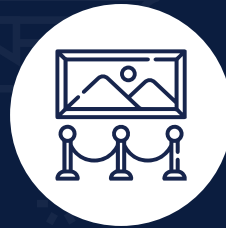
Red Cross



Sports



Cultural



Technical Exhibition



Yoga



# Admissions

## Admission Eligibility

### 1 1st Year Diploma

Successfully completed Grade 10, SSLC or its equivalent with a minimum of 35% marks

### 2 Lateral Entry (3rd Semester)

Successfully completed PUC or ITI



# Fee Structure

## General

**Rs. 4,270** Per Year



## Category

<b>SC/ST</b>	<b>Rs. 430</b> ( upto 2.5 lakh )
<b>SC/ST</b>	<b>Rs. 2,535</b> ( 2.5 to 10 lakh )
<b>CAT -1</b>	<b>Rs. 960</b> ( upto 2.5 lakh )
<b>2A, 3A, 3B</b>	<b>Rs. 960</b> ( upto 1 lakh )
<b>SNQ</b>	<b>Rs. 1,330</b> ( upto 1 to 8 lakh for all category )

## Girls

**Rs. 1,330** Per Year

@

Bangalore, Mangalore & Hubli  
Polytechnics for Women

## No Fee for Physically Challenged students

@

GPT - Belgavi  
LVP - Hassan  
WPT - Mangalore



# Fee Reimbursement & Scholarship

Categories	Income Limit	Reimbursement Amount (Rs)
		Government
Scheduled Caste / Scheduled Tribe	Below Rs. 2.5 Lakhs	3840/-
Scheduled Caste / Scheduled Tribe	Above Rs. 2.5 Lakhs & Below Rs. 10.00 Lakhs	2085/-
Category-1, 2A, 3A & 3B (excluding castes coming under minorities)	Rs. 1.00 lakh & Below	3310/-
Category-1 (Nadaf, Pinjara, Darvesh, Chapparband, Kasaba, Poolmali (Muslim), 2A-Buddhists, 2B-Muslims, 3B-Christians, Jain, Parsi and Sikhs	Rs. 1.00 lakh & Below and marks secured Min 50% & Above Marks in previous exams.	10000/-
Defence Scholarships	Students parent serving in Defense wing (Army, Air force, Navy) as Junior commissioned ranks & below other rank holder	3930/-



**AICTE Pragathi for GIRLS–Rs. 50,000 Per Year**



**AICTE Saksham for Physically Challenged students– Rs. 50,000 Per Year**



**AICTE Swanath for Orphan, Parent Covid death and Ward of Armed Forces, Central Parlimatary Forces martyred in action – Rs. 50,000 per year**

# Documents Required for Admission

**SSLC Marks Card**

**Transfer Certificate / NOC**

**Caste / Income Certificates**  
(if applicable)

**Study Certificates**

**Kannada /Rural Certificate**  
(if applicable)

**Sports/HK/Defence/NCC  
PH certificates** (if applicable)

**Passport size photo**  
(preferably with a white background)

In the event of documents not available, please make sure you get them with you at the time of admission.

# Admission Process

1



**First-Cum-First Admissions**

**@ 80 Polytechnics**

2



**Merit based Admissions**

**@ 19 Polytechnics**



# First – Cum –First Admissions

01

Polytechnics listed in the First-cum-First Admission courses, shall offer admissions on a first-cum-first admission basis

02

Students are required to visit these Polytechnics from May 19th till June 11th 2022 complete the application formalities, pay the required fees and collect their admission offer letters to complete the admission formalities.

03

SNQ /Sports/Scouts/NCC Quota for Govt and aided polytechnics Merit List Will be Separately Announced.





# Merit based Admissions

01

In the select list of 19 (Nineteen) Polytechnics, Merit based admissions shall be followed.

02

Applications will be accepted at Polytechnics from May 19th to May 26th 2022.

03

Students are required to visit these Polytechnics and complete the application formalities, within the time period notified.

04

Merit list will be announced at Polytechnics on May 28th, 2022 on Polytechnics website and notice board

05

Seat allotment will be announced at Polytechnics on May 30th 2022 on Polytechnics website and notice board

06

Students who have been offered admissions will be required to submit all necessary documents and pay the appropriate fees on or before June 02nd , 2022.

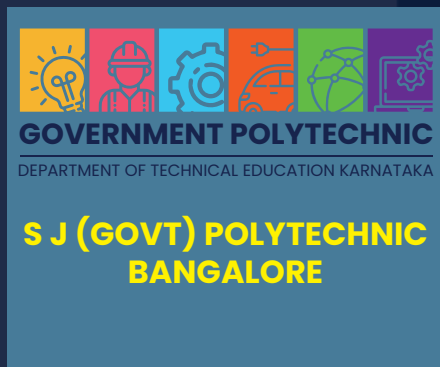
07

The admissions for any remaining seats after the 1st round, shall be filled by the Polytechnic on a first-cum-first admission basis after June 04th 2022.

**SNQ /Sports/Scouts/NCC Quota for Govt and aided polytechnics Merit List Will be Separately Announced.**

# International Twinning Programs

Sl No	Institute Code	College Name	Courses	Selection Procedure
01	102	S J (GOVT) Polytechnic	CY (24), TT (24)	Merit with Entrance Examination



## Highlights Of The Programs

- Students will study two years in India and one year in the USA plus with one year of work in USA
- Students on successful completion will be awarded Associate Degree from the Community College
- Students on completion of their associate degree program can either;
  - > Enrol for an Optional Practical Training (OPT) for industry exposure in USA

**OR**

  - > Seamlessly transfer into a bachelor's program at partner institutions in USA
- Students while in the USA, have the potential to earn during their associate degree study (as well as OPT anywhere between US \$ 35,000 to US \$ 60,000 during the two years in USA)
- Students can also enrol into a bachelor's program in USA after successfully completing their OPT

# Courses Offered

## AICTE Approved Engineering Courses:

AT	Automobile Engineering
CR	Ceramics
CH	Chemical Engineering
CN	Cinematography
CE	Civil Engineering (General)
EN	Civil Engineering (Environmental)
CS	Computer Science & Engineering
EE	Electrical & Electronics Engineering
EC	Electronics & Communication Engineering
ME	Mechanical Engineering (General)
HP	Mechanical Engineering (HPT )
WS	Mechanical Engineering (WSM)
MY	Mechanical Engineering (Machine Tool Technology)
MI	Mechanical Engineering(Instrumentation)
MC	Mechatronics
MT	Metallurgical Engineering
MN	Mining & Mine Surveying
PO	Polymer Technology
PT	Printing Technology
SR	Sound Recording Engineering
TX	Textile Engineering
IS	Information Science

# Courses Offered

FP	Food Processing & Preservation
AE	Alternate Energy Technology
CC	Cloud Computing & Big Data
AM	Automation & Robotics
CY	Cyber Physical System & Security
TT	Travel & Tourism / Tourism and Hospitality
EV	Electrical Engineering and Electric Vehicle Technology
GA	Gaming and Animation

## Non-Engineering

CP	Commercial Practice (English)
CK	Commercial Practice (Kannnada)
FT	Apparel Design and Fabrication technology
LI	Library Science & Information Management

# Courses Offered

List of Polytechnics offering Merit based Admission Courses and First-cum-First Admission Courses for the Academic Year 2022-23.

Sl No	Code	College Name	Merit Based Courses with Intake	First Cum First Admission Based Courses with intake
1	101	GITT, BANGALORE		TX(60)
2	102	S.J.P, BANGALORE	CS(60),CE(80),EC(60), EE(80),ME(80)	AT(60),CH(50),CR(30),EN(40), HT(40),MC(60),MI(40),MY(60), WS(40)
3	103	KPT, MANGALORE	AT(60)CS(60),CE(60), EC(60),EE(60),ME(60), CH(60)	PO(40)
4	104	GPT, BELLARY	AT(60)CS(60),CE(60), EC(60),EE(60),ME(60), MT(60)	
5	105	LVP, HASSAN	CS(60),CE(60), EE(60),ME(60)	AT(60),MY(60)
6	106	D.R.R., DAVANAGERE	CS(60),CE(80), EC(60),EE(80), ME(80)	CK(40),CP(40)
7	107	GPT, CHINTHAMANI	AT(60),CE(60),CS(60), EC(60),EE(60),ME(60)	CK(40),CP(40)
8	108	CPC, MYSORE	CE(60),CS(60),EC(60), EE(60),ME(60)	CP(E & K) (60),AT(60),MY(60)
9	109	GPT, KALABURGI	CE(60),CS(60),EC(60), EE(60),IS(30),ME(60)	
10	110	D.A.C.G., CHICKMAGALUR		AT(50),CE(60),CS(60), EC(60),EE(60),ME(60)
11	111	GPT, CHANNAPATNA	CE(60),CS(60),EC(40), EE(60),ME(60)	AT(60)
12	112	GPT, TUMKUR	AT(60),CE(60),CS(60), EC(60),EE(60),ME(60)	
13	113	GPT, BELGAUM	AT(60),CE(60),CK(60), CP(60),EC(60),EE(60), ME(60)	
14	114	GPT, KARWAR		AT(60),CE(60),CK(30),CP(30), CS(60),EE(60),ME(60)

Sl No	Code	College Name	Merit Based Courses with Intake	First Cum First Admission Based Courses with intake
15	115	GPT, BIDAR		AT(60),CE(60),CK(50),CP(50),EC(60),EE(60),ME(60),CS(30)
16	116	GPT, K R PET		CE(60),CS(60),EC(60),EE(60),ME(60)
17	117	GPT, RAICHUR	CE(60),CS(60),EE(60),	EC(60),ME(60)
18	118	GPT, KUSHALNAGAR	AT(60)CE(60),EC(60),EE(60),ME(60)	
19	119	WPT , BANGALORE		CE(60),CK(30),CP(60),CS(60),EC(60),FT(60),LI(30),GA(30)
20	120	GPT, VIJAYAPURA		AT(50),CE(60),CS(60),EC(60),EE(60),ME(60)
21	121	WPT, HUBLI		CE(50),CK(40),CP(40),CS(60),EC(60),FT(50)
22	123	G R I C P, BANGALORE		CK(80),CP(120)
23	124	WPT, MANGALORE		CK(40),CP(40),CS(60),EC(60),LI(50)
24	126	GIPT, BANGALORE		PT(90)
25	128	VISSJ GPT, BHADRAVATHI	CE(60),EE(60),ME(60),MT(60)	
26	130	GPT, CHAMARAJANAGAR	CE(60),CS(60),EC(60),ME(60)	MY(60)
27	131	SCHOOL OF MINES, K G F		CS(60),ME(60),MN(40)
28	132	WPT, HASSAN		CK(41),CP(41),EC(54),FT(45),LI(45)
29	135	RWPT, SHIMOGA		CK(30),CP(30),CS(60),EC(60),FT(60)
30	136	GPT, BAGEPALLI		AT(30),CS(60),EC(60),ME(60)
31	137	GPT, KOPPALL		CS(60),EC(60),ME(60)
32	138	GPT, KUSTAGI		CS(60),EC(60),ME(60)
33	139	GPT, SORAB		AT(30),CE(60),CK(15),CP(15),CS(60),EC(60)

Sl No	Code	College Name	Merit Based Courses with Intake	First Cum First Admission Based Courses with intake
34	140	GFTI, BANGALORE		CI(33),SR(17)
35	141	WPT,GULBARGA		CP(30),CS(60),EC(60),FT(30)
36	142	WPT, RAMANAGARAM		CP(54),CS(54),EC(54),EV(30),GA(30)
37	143	WPT,SIRALKOPPA		CE(60),CS(60),EC(60), ME(30),CC(30)
38	144	GPT, KARKALA		CE(60),CS(60),EC(60),ME(60)
39	145	GPT, UDUPI		CE(60),CS(60),EC(60),ME(60)
40	146	GPT,LINGASUGUR		AT(30),CE(60),CS(60), EC(30),ME(60)
41	147	GPT,GADAG		CE(60),CS(60),EC(60),ME(60)
42	148	GPT,GAJENDRAGADA		AT(30),CE(60),CS(30), EC(30),ME(60)
43	149	GPT,CHITRADURGA	CE(60),CS(60),EC(60), ME(60)	
44	150	GPT,HANGAL		CE(60),CS(60),EC(60),ME(60)
45	151	SMT, S R NIRAANI GPT,BELAGI		CE(60),CS(30),EC(60),ME(60)
46	152	GPT, BAGALKOTE		CE(60),CS(60),EC(60),ME(60)
47	153	GPT, BELUR		CE(60),CS(60),EC(60),ME(60)
48	154	GPT,HOLENARASIPURA		CE(60),CS(60),EC(60),ME(60)
49	155	GPT,TURVEKERE		CE(60),CS(60),EC(60),ME(60)
50	156	GPT,MULBAGAL		CE(60),CS(60),EC(60),ME(60)
51	157	GPT, ARAKERE		CE(60),CS(60),EC(60),ME(60) EV(30),AE(30)
52	158	GPT,NAGAMANGALA		CE(60),CS(60),EC(60),ME(60) EV(30),AE(30)

Sl No	Code	College Name	Merit Based Courses with Intake	First Cum First Admission Based Courses with intake
53	159	GPT, RAMANAGARAM		CE(60),CS(60),EC(60),ME(60) EV(30),GA(30)
54	160	GPT, MIRLAY		CE(60),CS(60),EC(60),ME(60)
55	161	GPT, AFZALPUR		CE(60),CS(30),EC(30),ME(60)
56	162	GPT, JOIDA		CE(60),CS(60),EC(60),ME(60)
57	163	GPT, BANTWALA	CE(60),CS(60),EC(60), ME(60)	
58	164	GPT, MUDHOL		CE(54),CS(54),EC(54),ME(54)
59	165	GPT, KARATAGI		AT(30),CE(60),ME(60)
60	166	GPT, KALAGI		AT(30),CE(60),EC(60),ME(60)
61	167	GPT, MUNDAGOD		CE(60),CS(60),EC(60),ME(60)
62	168	GPT, HOSADURGA		CE(54),CS(54),EC(54),ME(54)
63	169	GPT, BALAGANAHALLI KGF		AT(30),CE(30),CS(60),EC(60), ME(60)
64	170	GPT, GUTTUR HARIHARA	CE(60),CS(60),EC(60), ME(60)	
65	171	GPT, HUBBALLI	CE(60),CS(60),EC(60), ME(60)	
66	172	GPT, KAMPLI		CE(54),CS(54),EC(54),ME(54)
67	173	GPT, HARAPANAHALLI		CE(60),CS(60),EC(60),ME(60)
68	174	GPT, KUDLIGI		CE(60),EC(60),ME(60),CY(60)
69	175	GPT, IMMADIHALLI		CE(60),CS(60),EC(60),ME(60) GA(30)
70	176	GPT, JALAKI		CE(60),CS(30),EC(60),ME(60)
71	177	GPT, SIDDAPUR		CE(60),CS(60),EC(60),ME(60)



Sl No	Code	College Name	Merit Based Courses with Intake	First Cum First Admission Based Courses with intake
72	178	GPT, RABAKAVI BANNAHATTI		CE(60),CS(30),EC(60), ME(60) CC(30)
73	179	GPT, ATHANI		CE(60),CS(60),EC(60),ME(60)
74	180	GPT, SURPUR		AT(30),CE(60),CS(30),EC(30), ME(60)
75	181	GPT, AURAD		AE(30),AM(30),CE(60),ME(60)
76	182	GPT, HIRIYUR		CE(60),CS(60),EC(60),ME(60)
77	183	GPT, CHANNASANDRA		CE(45),CS(45),EC(45),ME(45)
78	184	GPT, DEVADURGA		CE(48),CS(30),EC(48),ME(48)
79	185	SHREE CHANNAKESHA GPT, BANKAPUR		CE(60),CS(60),EC(60),ME(60), TX(30)
80	187	GPT, SIRA		CE(60),EE(60),FP(30),ME(60)
81	188	WPT, HOLENARASIPURA		CE(60),CP(30),CK(30),CS(60), EC(60),EE(60)
82	189	GPT, MOSALE HOSAHALLI		CE(60),CP(30),CK(30),CS(60), EC(60),EE(60)
83	190	GPT, BASAVANABAGEWADI		AT(60),FP(60)
84	191	GPT, GOURIBIDANURU		AT(60),AE(60)
85	192	GPT, KAUP		CC(60),AM(60)
86	193	GPT, CHANNAGIRI		AT(60),AE(60)
87	194	GPT, HONNALI		AT(60),AE(60)
88	195	GPT, KOPPA		TT(60),FP(60)
89	196	GPT, THARIHAL		CE(35),CS(35),EC(35),EI(35)

Sl No	Code	College Name	Merit Based Courses with Intake	First Cum First Admission Based Courses with intake
90	197	GPT, KADUR		EC(60), CS(60)
91	198	GPT, HAROHALLI		EC(60), CS(60)
92	199	GPT, SADALAGA		CE(60), CS(60)
93	200	GPT, MALAVALLI		EC(60), CS(60)
94	705	GPT, KOLLEGALA		EC(60), CS(60)
95	706	GPT,HALIYAL		AE(60), CS(60)
96	707	GPT, GUNNALA		AE(60), CS(60)
97	708	GPT, HUVINAHADAGALI BALLARI (D)		EC(60), CS(60)
98	709	GPT, CHITRAHALLI HOLALKERE (T)		EV(60), CS(60)
99	710	GPT, BASAVAPATTANA DAVANAGERE (D)		EC(60), CS(60)



# PROGRAM STRUCTURE

## 1<sup>st</sup> Year – Workplace Skills

Comm. Skills

IT Skills

Project Skills

Maths

Stats & Analysis

Electrical & Electronics

Domain Subject 1

Domain Subject 2

## 2<sup>nd</sup> Year – Core Domain Foundation

Domain Subject 3

Domain Subject 4

Domain Subject 5

Domain Subject 6

Domain Subject 7

Domain Subject 8

Domain Subject 9

Domain Subject 10

## 3<sup>rd</sup> Year – Specialisation

Special Subject 1

Special Subject 2

Special Subject 3

Special Subject 4

Internship / Project

Idea to Prototype

Business Model

Market Study

Business Planning

Entrepreneurship

Research Methods

Technical Writing

Applied Science

Maths

Higher Education & Research



Government of Karnataka



**GOVERNMENT POLYTECHNIC**

DEPARTMENT OF TECHNICAL EDUCATION KARNATAKA

For More Information visit

<https://dtetech.karnataka.gov.in/kartechical/>

