

## List of Courses after 12th

SR.NO	STREAM	PROCEDURE	DESCRIPTION
1	Accessory Designer	Std. XII (Stream: Any)  Entrance ( <u>NIFT/NID</u> )  Graduate Degree (Accessory Design) (4yrs)	Accessory designers design a range of products that compliment the fashion image such as costume and precious jewellery, leather accessories, footwear, gift products, watches, crafts and lifestyle items, hair accessories etc. <ul style="list-style-type: none"> <li>• Accessory designers work very much like fashion designers. Before creating a design for an accessory they carry out detailed research of the accessory they are required to work upon.</li> <li>• They use their creativity to design accessories and make sample pieces. Contemporary accessory designers draw upon traditional craft for creating new and attractive designs for fashion conscious clients.</li> <li>• They present their design pieces for marketing.</li> <li>• Jewellery designers create new designs for gold, silver and precious metal jewellery.</li> </ul>
2	Accountant	Std. XII (Stream: Any Graduation) ( <u>B.Com/BBA/B.Sc./BA</u> )  Post-Grad ( <u>M.Com</u> )	Accountants work for individual and institutional clients. They maintain their accounts and keep a record of all financial transactions. They ensure accuracy of the accounts and compliance with tax regulations. <ul style="list-style-type: none"> <li>• Manage accounting systems efficiently according to laid down accounting procedures</li> <li>• Maintain financial records, assess financial operations</li> <li>• Study tax implications of their clients financial activities</li> <li>• Keep track of financial operations and statements to ensure accuracy, as well as legal and tax compliance</li> <li>• Compute taxes, prepare and file tax returns on time</li> <li>• Make suitable finance related recommendations to the management for enhanced revenues and profits</li> </ul>
3	Aeronautical Engineer	Std. XII (Stream: Science)	Aeronautical engineers design, develop and maintain aircrafts to ensure high level of technical precision and safe operations. They

		<p>Entrance Test (IITJEE)</p> <p>Graduation (BE/ B. Tech Aeronautical Engg.)</p> <p>Exam &amp; Post Grad (GATE- M. Tech)</p>	<p>work in close coordination with aircraft maintenance engineers and inflight and maintenance teams.</p> <ul style="list-style-type: none"> <li>• Aeronautical engineers specialise in the maintenance of instruments, electrical and electronic equipment, navigation, radar and radio communication.</li> <li>• Flight engineers make pre-flight inspections and are responsible for the efficient performance of the aircraft during the flight. They diagnose and deal with any system failures, manage repairs, report any defects to maintenance and later check that they have been dealt with. They may also be responsible for refuelling.</li> <li>• Engineers carry out routine maintenance on the ground during aircraft overhauling at airports</li> <li>• They respond to reports from air crew of any difficulties experienced during flights, and carry out repairs and corrections</li> </ul>
4	Aerospace Engineer	<p>Std. XII (Stream: Science)</p> <p>Entrance (JEE Main&gt;JEEAdvanced)</p> <p>Graduation (BE/B. Tech Aerospace)</p> <p>Test&gt;PG (GATE&gt;M. Tech Aerospace)</p>	<p>Aerospace engineering is the study of the complexities of materials and structures put to use under atmospheric stress. Research &amp; Development in aircraft manufacture requires highly trained engineers, scientists and technicians specializing in areas such as aerospace, aeronautics, electronics, computer science, robotics, bio medicine, acoustics, chemistry, physics and meteorology. Manufacturing of aircrafts for commercial or military use and space research and spacecraft production are high tech fields in which Aerospace engineers are engaged.</p> <ul style="list-style-type: none"> <li>• Aerospace engineering encompasses the fields of aeronautical and astronautical (spacecraft) engineering.</li> <li>• Aerospace engineers work as a team in designing, assembling and testing air crafts and space crafts. Aerospace engineers may be required to work on the designing of complete air crafts or may specialise in special areas of the industry such as missile guidance</li> </ul>

			<p>systems, propulsion, and guidance control systems.</p> <ul style="list-style-type: none"> <li>• Aeronautical engineers work specifically with aircraft systems while astronautical engineers specialise in space craft systems.</li> <li>• Aerospace engineers learn and apply the knowledge of aerodynamics, propulsion, thermodynamics, fluid mechanics, flight mechanics, and structural analysis.</li> </ul>
5	Agricultural Engineer	<p>Std. XII (Stream: Science) Entrance Exam (<u>JEE</u>) B. Tech(Agricultural Engg.) 4yrs Exam &amp; PG (GATE&gt;M. Tech)</p>	<p>Agricultural engineers learn and apply the principles of engineering in designing and directing the manufacture of machines and equipment for the agricultural sector, agricultural produce processing industries and food industries.</p> <ul style="list-style-type: none"> <li>• Agricultural engineers learn and apply the principles of engineering in designing and directing the manufacture of machines and equipment for the agricultural sector, agricultural produce processing industries and food industries</li> <li>• Develop new designs for equipment's and machines used by the agriculture and food industry</li> <li>• Coordinate with electronic/electrical engineers for perfecting the technology of the equipment's they design and manufacture</li> <li>• Supervise production of agricultural equipment's, machinery and machine parts.</li> <li>• Plan agriculture based industries, projects, drainage systems, land reclamation projects</li> <li>• Work on flood control and soil erosion projects.</li> </ul>
6	Air Force Officer	<p>Std. XII (Stream: Science) Graduation (B. Tech/BE Aero) Selection (AFCAT &gt;SSB) Training (AFA &gt;AFTC)</p>	<p>Indian Air Force is one of the major air arms in the world and can boast of the best trained men and material force, engaged in defence to guard the country's skies against external aggression from air. Aircrafts are the major constituent of the Air Force, used both for defence and offence. Hence, the entire service is engaged in the flying of aircraft and the pilot is the key person in</p>

			<p>the organization. For operational readiness of the flying machines, an infrastructural strength of highly trained and qualified man power is required.</p> <ul style="list-style-type: none"> <li>• Flying Branch has following four categories of aircraft flyers: Fighters &amp; fighter bombers, Bombers, Transport, and Helicopters. Pilots usually specialise in one type of aircraft.</li> <li>• Pilots are employed exclusively in flying duties, however, they may also be assigned other duties.</li> <li>• Transport Pilots carry men, material and explosives to required places. They also carry army personnel, their weapons, guns and light vehicles from one theatre of war to another.</li> <li>• Navigators in transport aircrafts chart the route, supervise loading of men and equipment, work out fuel requirements and check the flight path with maps during the flight.</li> </ul>
7	Air hostess	<p>Stream: Any</p> <p>Graduation(Any/Mgmt./Home SC)</p> <p>Selection (Airlines)</p> <p>Training(Air Hostess Academies)</p>	<p>Air hostesses and their male counterparts, the inflight stewards or assistants, are hosts on passenger airlines. They are responsible for inflight service of food and beverages and for passenger comfort during the flight. They are trained to provide assistance in times of distress.</p> <ul style="list-style-type: none"> <li>• They are briefed by the captain on expected weather conditions, special passenger problems etc.</li> <li>• They check emergency equipment in the aircraft.</li> <li>• The aircraft and toilets are tidied and seat pocket information put in place.</li> <li>• Meals and beverage for the number of passengers on board is checked.</li> <li>• First-aid kits and other emergency equipment are checked.</li> </ul>

			<ul style="list-style-type: none"> <li>• They greet passengers coming aboard, check their tickets, and assist them in storing carry-on luggage.</li> </ul>
8	Animator	<p>Std. XII (Stream: Any)</p> <p>Entrance test (NID-DAT)</p> <p>Professional NID (Animation Film Design )</p>	<p>Animators are artists who draw cartoons and pictures which are used in multimedia productions to entertain, educate or persuade people. Animators use computers to create images, give them colour and use special effects to make a film. They generally specialize in animation for gaming, film-making, education etc.</p> <ul style="list-style-type: none"> <li>• Create a visual script consisting of drawings on paper for the animation sequence, with key scenes and characters.</li> <li>• Write storyline to match the animation images and develop storyboard for the main theme in the animation.</li> <li>• Digitally scan animated objects, view and manipulate in three dimensions.</li> <li>• Use computer programs to create graphic images and animation.</li> <li>• Introduce illusion of movement, as the power of motion is animation.</li> <li>• Introduce light, colour, texture, shadow and transparency</li> <li>• Create visual effect for movies, games, ads etc.</li> <li>• Implement feedback from end users to bring about necessary modifications.</li> </ul>
9	Architect	<p>Std. XII (Stream: Science)</p> <p>Entrance Test (NATA/JEE)</p> <p>Graduation (B. <u>Architecture</u>)</p> <p>Post Grad( M. Arch)</p>	<p>Architects design and plan buildings and structure which are appropriate in terms of materials and design and also meet the client's specifications.</p> <ul style="list-style-type: none"> <li>• They work on a set of instructions from their clients defining the type of building required - residential, commercial or industrial or an entire housing or industrial estate and the estimated budget available.</li> <li>• The project could involve designing from the very beginning or making alterations to existing structures.</li> </ul>

			<ul style="list-style-type: none"> <li>• The ideas are discussed and approved</li> <li>• Sketches and plans with details of sizes, specifications are made and estimates of the cost of building materials are prepared.</li> <li>• Models for a more graphic presentation of a project may be prepared.</li> <li>• Designing of the interior layout of buildings</li> <li>• The work may be done by an architect alone, in a team, or with the aid of architectural technicians. This largely depends on the type of organization or firm an architect is working for and the type of contracts he undertakes.</li> </ul>
10	Army Officer	<p>Std. XII (Stream : Any)</p> <p>Graduation (Any subject)</p> <p>Selection Exam (Combined Defence Services Exam)</p>	<p>The Army is trained both for offence and defence, to defend the geographical parameters of the country from neighbouring countries or distant invaders and can also be used to take over the territory of the enemy country. Army also comes to civilian aid during various types of emergencies like floods, earth quakes, civil riots and insurgencies, etc. The Army is made up of regiments and corps, each of which has a specific military function.</p> <p>Army constitutes the Infantry, Armoured Tanks, Artillery, Engineers, Communication troops and other support troops who look after clothing, food, transportation, repair of equipment's and give medical help.</p> <p>Infantry</p> <ul style="list-style-type: none"> <li>• Infantry has a number of regiments and forms almost 25% of the Army. It plays a major role during war and in the Army's peace keeping tasks.</li> <li>• Infantry fights the enemy on foot by using rifles, stenguns, grenades, machineguns, mortars, anti tank guns, small rockets, etc.</li> <li>• Holds the ground by physically occupying it during</li> </ul>

			<p>invasions or defends the ground and borders during peace.</p> <ul style="list-style-type: none"> <li>• Uses armoured personnel carriers and other vehicles for rapid movement.</li> <li>• Officers specialise in handling of various types of arms and rockets, etc.</li> </ul>
11	Banker	<p>Path 1</p> <p>Std. XII (Stream:Com/Any)</p> <p>Graduation (BA/B. Com)</p> <p>Selection Test (Bank Probationary officer test)</p> <p>Training (In service)</p> <p>Path 2</p> <p>Std. XII (Stream:Com/Any)</p> <p>Graduation (BA/B.Com)</p> <p>PG (MBA)</p>	<p>Managing a bank branch is the branch manager. He has officers, clerical and other staff who undertake responsibilities in its various departments. The head office coordinates between the various branches and oversees the functioning of the branches in public sector banks. All banks are governed by the regulations and directives from the Reserve Bank of India. The multinational banks follow a flexible and business oriented work structure.</p> <p>Bank Manager</p> <ul style="list-style-type: none"> <li>• Responsible for branch operations</li> <li>• Information of customers and the services required</li> <li>• Advising customers</li> <li>• Managing and motivating staff</li> <li>• Generating profits</li> <li>• Approving personal or business loans</li> <li>• Giving safe investment advice</li> <li>• Inspecting property offered as security</li> </ul>
12	Big Data Analyst	<p>Std. XII (Stream: Any)</p> <p>Grad/Dip (BA,B. Com, B. Sc, BE,B. Tech)</p> <p>Post-grad(MA/MSc, M. Tech)</p>	<p>Big data analysts help organizations harness and use data to plan business strategies, improve operational efficiency, identify new opportunities and generate higher profits. Generate insights from large volumes of classified and unclassified data using skill sets of data acquisition, data mining, data structuring, and data analysis.</p> <ul style="list-style-type: none"> <li>• Examine Big Data to decipher hidden patterns, correlations, market trends, customer preferences etc.</li> <li>• Use technology to handle high volumes of data streaming from a variety of sources such as business transactions,</li> </ul>

			<p>social media, sensor or machine-to-machine data</p> <ul style="list-style-type: none"> <li>• Structure data rapidly streaming in real time as well as data in seasonal and periodic peaks</li> <li>• Manage data in formats such as text, numeric, audio, video, email, money transactions, etc.</li> <li>• Link, match, cleanse and transform data coming from a variety of sources across computer systems</li> <li>• Provide data analysis to enhance cost management, product development, time reduction, and smart decision making</li> </ul>
13	Biomedical Engineer	<p>Std. XII (Stream: Science)</p> <p>Entrance (Grad) (JEE_</p> <p>Selection Test(GATE) For PG</p>	<p>Biomedical engineers integrate the knowledge of biology and medicine to analyse and devise solutions for improving healthcare in terms of quality and efficacy.</p> <ul style="list-style-type: none"> <li>• Integrate the knowledge of science and engineering to design systems and products which can substitute damaged body parts such as artificial organs and devices.</li> <li>• Devise equipment's for diagnostic purposes as specialists in Bio-instrumentation applying principles of electronics and measurement. Knowledge of high end computing is important in this specialty.</li> <li>• Coordinate their work extensively with biological scientists, physicians and surgeons, and chemists to understand, interpret and further research biological systems which can be replicated or facilitated through engineering innovations.</li> <li>• Come from technical backgrounds-e.g mechanical, chemical, electrical or with background in anatomy, physiology, and computers to create mathematical models that simulate physiological systems.</li> </ul>

14	Border Security Force (BSF)	Std. XII (Any) Graduation (Any Subject) Selection (Physical suitability)	<p>Border Security Force (BSF) is deployed all along the borders of our country, along mountainous terrains, deserts and long coastal stretches for keeping vigil against infiltrators, smugglers and terrorists. This is a central armed police force under the government for national security.</p> <ul style="list-style-type: none"> <li>• Provides intelligence reports from the border regions</li> <li>• Protects vital installations</li> <li>• Provides protection to people in the border areas</li> <li>• Assists in controlling riots, insurgencies, chaotic situations caused by natural disasters</li> </ul>
15	Broadcast Engineer	Std. XII (Stream: Science) Entrance Test (JEE/Engg. Entrance Tests) Graduation (B.E/ B. Tech)	<p>Broadcast engineers are involved in the transmission of audio and video programs for the public using high end electronic equipment.</p> <ul style="list-style-type: none"> <li>• Work with technical crew to transmit radio and television programs through live and recorded broadcasts</li> <li>• May use mobile equipment for transmission</li> <li>• Have complete knowledge of the equipment, oversee the technical team who operate, install, maintain and repair the equipment</li> <li>• Determine, regulate, and log the strength of the transmission signal to the assigned frequency.</li> <li>• Maintain a log of program transmissions and the time</li> <li>• Diagnose problems in transmission and trouble shoot</li> <li>• Oversee the work of video technicians working in television studios to maintain the quality of visual images, brightness and content</li> </ul>
16	Cardiologist	Class XII (Stream: Science) Entrance (NEET-UG)	<p>Cardiologists are physicians who diagnose and treat heart and cardiovascular ailments. They may specialize in noninvasive, invasive and interventional cardiology.</p>

		<p>Graduation (<u>MBBS</u>)</p> <p>PG Entry &amp; Course (NEET-PG/CET &gt;MD Medical)</p>	<ul style="list-style-type: none"> <li>• Has office-based practice where he consults with patients to prevent and manage potential heart problems.</li> <li>• Performs diagnostic tests to identify heart problems</li> <li>• Prescribes appropriate drug therapy or dietary regimen</li> <li>• Perform ECHO's, stress tests, and EKG's (electrocardiograms).</li> <li>• Use nuclear camera to take images of the heart after the patient is injected with radioactive dye.</li> <li>• Makes referrals if the heart problem requires any type of surgical procedure.</li> </ul>
17	Cartoonist	<p>Class XII (Stream: Any)</p> <p>Entrance (NID)</p> <p>Course (B. Design)</p>	<p>Cartoonists use their skill in drawing and sketching to create comic, critical or dramatic pictures to highlight or interpret published information. They may create illustrations, portraits, comic strips, animations, story board etc</p> <ul style="list-style-type: none"> <li>• Discuss their ideas with the editor, producer or creative director for ads.</li> <li>• Translate their ideas into pictures</li> <li>• Create the images and write captions.</li> <li>• Create comic strips to tell jokes or short stories.</li> <li>• Create comic books by illustrating in pictures the whole story.</li> <li>• Use computers to create the pictures and animations and are called motion cartoonists or animators</li> <li>• Portraitists draw caricatures</li> <li>• Editorial cartoonists draw pictures of any social aspect, which is comic or satirical.</li> <li>• Cartoonists use their skill in drawing and sketching to create comic, critical or dramatic pictures to highlight or interpret published information. They may create illustrations, portraits, comic strips, animations, story</li> </ul>

			board etc.
18	Chartered Accountant	<p>Std. XII (Stream: Any)</p> <p>Grad/PG (Com 55% Other subjects 60%)</p> <p>CA course Intermediate</p> <p>CA Final exam</p>	<p>Chartered Accountants deal with the management of money and provide financial advice. They maintain records of financial transactions which every organisation is required to keep by law and also carry out company audits.</p> <ul style="list-style-type: none"> <li>Chartered Accountants are members of the Institute of Chartered Accountants of India. They work in private practice or in the accounts department of firms and organisations. The range of work in private practice can vary enormously according to the size and place (city) of practice. If it is a large practising firm there is greater specialisation of individual accountants within the organization.</li> <li>Computers are widely used in accounting and auditing. Accountants summarize transactions in standard formats for financial records, calculate projected financial ratios, or organize data in special formats for financial analysis.</li> </ul>
19	Chemical Engineer	<p>Path 1</p> <p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2</p> <p>Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p>	<p>Chemical Engineers work out economically efficient, safe and environment friendly methods for production of chemicals on a large scale. Equipment for the processing of chemicals and related products such as plastic, pharmaceuticals, detergents, foodstuff etc. are also designed and maintained by Chemical Engineers.</p> <ul style="list-style-type: none"> <li>Apply knowledge of Chemistry, Biology and Physics to the industrial production and use of chemicals and related products</li> <li>Carry out research to develop new and better manufacturing processes</li> <li>Design equipment</li> <li>Plan, manage, and troubleshoot the running of an</li> </ul>

		<p>Selection (GATE)</p> <p>Post graduation (M. Tech)</p>	<p>installation</p> <ul style="list-style-type: none"> <li>• Conduct tests to monitor the efficiency and safety of the production processes</li> <li>• Develop safety standards for workers in the industry</li> <li>• Evaluate the installed equipment to follow safety regulations and environmental guidelines</li> <li>• Project costs of production to the management</li> <li>• Develop methods to carry out complex chemical processes</li> <li>• Chemical Engineers work in the energy, food, clothing, petroleum, healthcare, biotechnology etc. sectors</li> <li>• Specialize in Nano-materials, Polymerization, Oxidation etc</li> </ul>
20	Civil Engineer	<p>Path 1</p> <p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2</p> <p>Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p> <p>Selection (GATE)</p> <p>Post graduation (M. Tech)</p>	<p>Civil Engineering is the oldest branch of engineering and incorporates the design and construction of roads, airports, tunnels, bridges, water supply and sewage systems, dams, harbours, railroad systems, docks, power supply systems, buildings and even nuclear power plants etc. Civil Engineers work as construction engineers, transportation engineers, hydraulic and irrigation engineers, geotechnical engineers, environmental engineers, public works engineers.</p> <ul style="list-style-type: none"> <li>• Civil engineers work in their office and on the construction site.</li> <li>• Contracting engineers as well as consulting civil engineers have to work on several sites at the same time.</li> <li>• Structural engineers design oil rigs, multi-storied car parks or office blocks to ensure that the structural framework of the building is strong enough to take the load for which the structure is meant. It is also designed to withstand heat, cold and tremors. They develop non conventional construction materials and techniques, e.g., special bridge structures, building framework etc</li> </ul>

			<ul style="list-style-type: none"> <li>• Water management engineers specialize in water supply, sewerage systems and pollution control</li> <li>• Highway engineers are involved in assessing, planning rebuilding road networks, one way systems, traffic lights, lanes, parking spaces etc. Highway engineers are concerned with road building and traffic management</li> <li>• Civil Engineers deal with critical problems such as disaster mitigation and management</li> </ul>
21	Computer Engineer	<p>Path 1</p> <p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2</p> <p>Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p> <p>Selection (GATE)</p> <p>Post graduation (M. Tech)</p>	<p>Computer engineers are trained to work as hardware engineers. They design, research, develop and test computer systems and ancillaries such as processors, circuit boards, network platforms, memory devices and routers. These engineers innovate and develop hardware for advances in computer technology.</p> <ul style="list-style-type: none"> <li>• Understand and apply knowledge of computer science and electrical engineering.</li> <li>• Develop and work with digital technology, in computer networking and computer systems.</li> <li>• Develop computer hardware and design and implement software applications</li> <li>• Use skill and knowledge in hardware and software design</li> <li>• Work in computer programming to make computing platforms and applications both effective and efficient.</li> <li>• Ensure smooth functioning and integration of computer hardware and software.</li> <li>• Keep updates about latest innovations in technology</li> <li>• Optimize network capabilities and communications systems.</li> <li>• Computer engineers have 2 major career options- Software and Hardware engineering.</li> <li>• As hardware engineers they work on computer systems</li> </ul>

			<p>and all components used to make a computer.</p> <ul style="list-style-type: none"> <li>• As software engineers they test and work with computer programs, applications, network security, mobile and other computer operated devices.</li> <li>• They also work in Robotics, Aeronautic design, wireless networks, sophisticated equipment's etc.</li> </ul>
22	Database Administrator	<p>Std. XII(Stream: PCM)</p> <p>Graduation (<u>B.Sc/B. Tec Comp Sc/Inf. Tech</u>)</p> <p>Certification(<u>SQL/Oracle+Prog lang</u>)</p> <p>Skill(Practical Skill)</p>	<p>Database Administrators design, install, maintain, update, modify and trouble shoot computer database systems.</p> <ul style="list-style-type: none"> <li>• Work in different size and type of establishments</li> <li>• Confer with company officials to discuss the specific task and determine the type of computer system a company requires</li> <li>• Create systems design and use applications to ensure efficient data flow</li> <li>• Code, test and install new databases and ensure operational efficiency</li> <li>• Modify and test the database structure for efficiency</li> <li>• Manage technical and physical aspects of the database carrying out regular updates and bug fixes</li> <li>• Have a robust backup system in place</li> <li>• Ensure security of computer operations and data from unauthorized users</li> <li>• Supervise computer room operations</li> <li>• Conduct training of personnel</li> </ul>
23	Dentist	<p>Std. XII (Science:PCB)</p> <p>Selection Exam (NEET-UG)</p> <p>Graduation (<u>Bachelor of Dentistry</u>)</p> <p>Post graduation(<u>Masters in Dentistry</u>)</p>	<p>Dentistry is concerned with prevention and treatment of all health problems affecting the mouth, teeth, gums and other hard and soft tissues of the oral cavity. General dentists' job involves prevention and repair of infected teeth through cleaning and filling and makes referrals for any special condition. The specialists in this profession are Orthodontists, Periodontitis, Oral Surgeons, Pedodontists, Prosthodontists and Endodontists.</p>

			<ul style="list-style-type: none"> <li>• Orthodontists correct irregularities in the teeth through the period of growth. They correct this by putting braces or other such devices</li> <li>• Periodontists treat diseases of the gum and tissues which support teeth. They carry out oral implants</li> <li>• Oral surgeons are trained to conduct surgery for treating fractures, correcting facial deformities, conducting complicated extractions, and treating abnormal growth in the mouth and jaws such as tumors</li> <li>• Pedodontists specialize in children's dental treatment and care</li> <li>• Prosthodontists are specialists who make artificial dentures according to specifications for the client</li> <li>• Endodontists treat the inner structure of the tooth and are specialists for treating nerve inflammation and carry out root canal treatment</li> </ul>
24	Detectives	<p>Std. XII (Stream: Any )</p> <p>Graduation (Any discipline)</p> <p>Service (Police service)</p> <p>Training (Detectives training)</p>	<p>Detectives investigate criminal activities to collect evidence which are difficult to gather. They use professional techniques such as questioning, camera sting operations, surveillance, tracking records and documents etc.</p> <ul style="list-style-type: none"> <li>• Help law enforcing agencies or companies or individuals in the investigation of a crime such as burglary, murder, kidnapping Insurance fraud etc.</li> <li>• Inspect the crime scene and collect evidences from the scene of the crime</li> <li>• Physical evidence which are collected such as weapon, broken pieces of porcelain, furniture etc. are secured in plastic bags</li> <li>• Collect biological and criminals evidence such as hair, blood, pieces of clothing, footprints and fingerprints</li> <li>• Document records of all the evidence collected and send it to forensic labs for examination</li> </ul>

			<ul style="list-style-type: none"> <li>• Interview people from the scene of the crime and record statements relevant to the crime</li> </ul>
25	Doctor	<p>Std. XII (Stream: PCB/Biotech &amp; English)</p> <p>Entrance Test (NEET)</p> <p>Graduation (MBBS)</p> <p>PG Entry &amp; Course (NEET-PG/CET-DNB &gt; MD/MS)</p>	<p>Doctors are medical professionals who treat patients in hospitals. Physicians diagnose a patient, and prescribe medicines and treatment for disease, while surgeons perform operations. Allopathic medicine is one of the largest and most extensive fields of study and research with many different specialties.</p> <ul style="list-style-type: none"> <li>• Educate clients for prevention and control of disease</li> <li>• Diagnose different ailments and disease</li> <li>• Prescribing medicines and treatment</li> <li>• Advise patients for follow up</li> <li>• Keep a record of diagnosis and treatment of each patient</li> <li>• Specialize in different medical specialties such as cardiology, rheumatology etc. Training is for 3 years after the basic degree (MBBS). Super specialization requires further study.</li> <li>• Work in large hospitals to offer treatment in all branches covered under the medical specialties, in multi-speciality hospitals, clinics, nursing homes or are in defence or government hospitals to provide similar medical cover.</li> <li>• May teach and examine junior doctors or carry out research.</li> <li>• Make referrals.</li> </ul>
26	Economist	<p>Std. XII (Stream: Com/Sc with Eco &amp; Maths)</p> <p>Graduation (Bachelors in Economics)</p> <p>Post graduation (Masters/IES exam)</p>	<p>Economists analyse issues related to growth and development, welfare and policy formulation, and assess their long and short term significance for the country. Economics is the study of production and distribution processes and the most effective means of utilizing available resources.</p> <p>Economists work in one of the three sectors:</p> <ul style="list-style-type: none"> <li>• Government and Public sector enterprises</li> </ul>

			<ul style="list-style-type: none"> <li>• Industry and Trade</li> <li>• Banking and Finance</li> </ul>
27	Electrical Engineer	<p>Path 1</p> <p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2</p> <p>Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p> <p>Selection (GATE)</p> <p>Post graduation (M. Tech)</p>	<p>Electrical Engineers are involved in the manufacturing of electrical equipment such as power generation equipment, electric motors, radar and navigation systems, communication systems, electrical systems of automobiles, ships and aircrafts.</p> <ul style="list-style-type: none"> <li>• Design, manufacture and operate power plants, industrial machinery, electrical motors, and ignition systems for automobiles, aircrafts, space crafts and all kinds of engines</li> <li>• Research and design improved ways for using electrical power</li> <li>• Compute detailed calculations for the manufacture, construction and installation of electrical equipment as per specifications</li> <li>• Work with project managers on the budget and timeline for completion of a project</li> <li>• Direct the manufacturing process to meet guidelines</li> <li>• Attend to operational issues and trouble shoot problems in the operation of electrical equipments</li> </ul>
28	Electronic Engineer	<p>Path 1</p> <p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2</p> <p>Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p>	<p>Electronic engineers design and manufacture electronic devices such as computers , telephones etc. and electronic components used in a range of products.</p> <ul style="list-style-type: none"> <li>• Invent, innovate, design, assemble and operate electronic systems used for scientific work, commercial production, entertainment</li> <li>• Specialize in computer technology, aerospace and biomedical equipment's, industrial equipment's and controls</li> <li>• Research in designing and development, new applications and devices</li> </ul>

		<p>Selection (GATE)</p> <p>Post graduation (M. Tech)</p>	<ul style="list-style-type: none"> <li>• Work in production, direct technicians, check on efficiency in production and use research findings in the manufacturing of electronics</li> </ul>
29	Ethical Hacker	<p>Std. XII (Stream: ScPCM )</p> <p>Graduation (B.E/ B. Tech/ B.Sc)</p> <p>Certifications (Security Systems/ CEH)</p>	<p>Ethical hackers work for all organizations which have an internet presence. Ethical Hackers role is a proactive one as they prevent cyber- crimes and protect cyber space from intrusion. They ensure data security and protect computer systems from illegal hacking activities.</p> <ul style="list-style-type: none"> <li>• Use their expertise in computing and knowledge of programming, web applications, operating systems, assembly language, internet security systems etc. to protect computer systems from illegal hackers</li> <li>• Work on the computer network of their client to find areas which are susceptible for attack</li> <li>• Buff up the computer security system by making safety modifications to plug any loopholes and prevent it from illegal hackers</li> <li>• Carry out penetration testing and intrusion testing for the computer network under their charge</li> <li>• Are concerned with encryptions, security protocols and firewalls and other areas of internet security</li> </ul>
30	Fashion Designer	<p>Std. XII (Stream: Any)</p> <p>Entrance Test (NIFT/NID)</p> <p>Degree (Fashion Design(4yrs))</p>	<p>Fashion Designers design garments which are functional as well as attractive and in keeping with trends, market predictions and the climate. They have knowledge about fabric, weave, draping qualities, material, colour and design and the changing trends.</p> <ul style="list-style-type: none"> <li>• Exploration and research</li> <li>• Sketching the original idea on paper</li> <li>• Shaping the pattern pieces which make the garment</li> <li>• The pieces are then drawn in actual size on paper and cut</li> </ul>

			<p>out on a rough material, stitched together and fitted on a model</p> <ul style="list-style-type: none"> <li>• Modifications in the pattern pieces or other features of the mock up are made and thus the design is completed</li> <li>• Garments are then made in the final fabric</li> </ul>
31	Finance Manager	<p>Std. XII (Stream: ScPCM/Com(Maths, Eco))</p> <p>Graduation (<u>B. Eco/Business Eco/Maths</u>)</p> <p>Post graduation (Fin Mgmt./Masters Finance Control)</p>	<p>Financial managers prepare financial reports, advise on investments and are involved in financial management strategies and planning for business viability.</p> <p>Manufacturing, communications, finance, education, or health care sectors employ one or more financial managers. The positions are of treasurer, controller, credit manager, cash manager, and others who are responsible for preparing financial reports to meet tax and other regulatory demands.</p> <p>Finance Managers</p> <ul style="list-style-type: none"> <li>• Oversee the flow of cash and finances</li> <li>• Develop information to assess the present and future financial status of the firm</li> <li>• Planning and controlling the flow of funds within and outside of the organization</li> <li>• Work with top management to arrange for long term finance</li> <li>• Develop financial and economic policy, establish procedures, delegate authority, and oversee the implementation of these policies</li> <li>• Set up budgetary systems, financial services and make appraisals of the adequacy of accounting methods</li> <li>• Maintain liaison with banking personnel, financial institutions, treasury officials for sourcing funds, and control financial activities</li> <li>• Plan, coordinate and manage the financial operation for diversification of business operations</li> </ul>

32	Forensic Scientist	<p>Std. XII (Stream: Science PCM)</p> <p>Graduation (Physical/ Biological Science)</p> <p>Post graduation (Forensic Science)</p> <p>PhD/Fellowship</p>	<p>Forensic Scientists analyze, identify and classify physical evidence relating to criminal or suspected cases of crime. They investigate to look for evidence which are tested in laboratories and records prepared for each case. Forensic science is interdisciplinary and includes investigative science related to Explosives, Narcotics, Ballistics, Lie Detection, DNA Fingerprinting, Cyber/ Computer, Document Examination etc.</p> <ul style="list-style-type: none"> <li>• Forensic Scientists identify, collect and classify physical evidence relating to a crime or criminal suspected of crime</li> <li>• The collection of samples is their responsibility from the sight of the crime and this could be in the form of material evidences such as bullets, explosives etc or chemical and biological evidence such as blood, hair, teeth, alcohol, bones etc</li> <li>• They also photograph the site of the crime to piece together facts &amp; document evidence</li> <li>• Forensic investigations are always conducted independently of the police investigators</li> <li>• Evidences are tested in laboratories and records prepared for each case</li> <li>• Their work involves close examination of samples of evidence in the laboratory using microscope, spectrosopes, infrared and ultraviolet lights, etc</li> </ul>
33	Game Developer	<p>Path 1</p> <p>Std. XII (Stream: ScPCM)</p> <p>Graduation (<u>BSc/BE/B. Tech</u>)</p> <p>Post-Graduation (<u>MCA</u>)</p> <p>Certification</p>	<p>Video game developers are software engineers who create video games for computers and video game consoles. They are involved from the conception to the final production of the video game.</p> <ul style="list-style-type: none"> <li>• Work as a team with the producer, programmers, animators and graphic artists, audio and sound team</li> <li>• Create the storyboard, script the game and detail the character biographies</li> </ul>

		<p>Path 2</p> <p>Std. XII (Stream :Any)</p> <p>Entrance (NID)</p> <p>B. Des&gt;M. Des (Game Design)</p>	<ul style="list-style-type: none"> <li>• Review the design with designers and graphic artists who use 2D and 3 D animation software for creating the visual images at the concept stage</li> <li>• Add audio components of the game</li> <li>• Write the code for the key features of the video game (generally done by programmers and software developers)</li> <li>• Structure the mechanics for mock role play</li> <li>• <input type="checkbox"/> Design prototypes for review by the management</li> </ul>
34	Hotel Manager	<p>Std. XII (Stream: Any)</p> <p>Entrance Test (Hotel Management)</p> <p>Diploma /Degree (<u>Hotel Management</u>)</p>	<p>Hotel management is a service industry which focuses on serving the needs of its clients. Training in hotel management has wide applications which can be used in several service industries. Hotel Managers are responsible for the efficient and profitable operation of their establishments.</p> <p>Hotel managers</p> <ul style="list-style-type: none"> <li>• Are responsible for the efficient and profitable operation of their establishments</li> <li>• Controls all financial aspects</li> <li>• Establishes norms of service to be provided to guests, the standard of housekeeping, food quality, decoration and banquet operations</li> </ul>
35	IAS Officer	<p>XII (Any Stream)</p> <p>Graduation (Any)</p> <p>Entrance Test (UPSC Entrance Test)</p> <p>Interview</p>	<p>Indian Administrative Service (IAS) was constituted in 1946 as a permanent bureaucratic cadre of All India Services. IAS is an integral part of the executive branch of the Government of India responsible for continuity and impartial governance. IAS officers hold vital appointments in the Union government, State governments and Public Sector Undertakings (PSU).</p> <p>IAS Officers</p> <ul style="list-style-type: none"> <li>• At the divisional level as Sub Divisional Magistrate are</li> </ul>

			<p>responsible for general administration, development work, revenue work and law and order in the area under their charge</p> <ul style="list-style-type: none"> <li>• Follow rules and financial propriety for the use of public funds</li> <li>• Collect revenue and function as Courts in revenue matters</li> <li>• Carry out executive responsibilities in administrative appointments such District Magistrate, Chief Development Officer, District Development Commissioner, Director of a department, Managing Director of a Public Sector Unit or a Senior officer in the State Secretariat</li> <li>• In the State government hold appointments as Deputy Secretary; Joint Secretary, Special Secretary, Secretary, Principal Secretary, Chief Secretary and are in charge for formulating policies and for the supervising for the implementation.</li> </ul>
36	Instrumentation Engineer	<p>Path 1</p> <p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2</p> <p>Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p> <p>Selection (GATE)</p>	<p>Instrumentation Engineering is a multidisciplinary field and a specialist branch of electrical and electronics engineering. It covers subjects from other engineering disciplines such as Mechanical, Chemical, Electrical , Electronics and Computer Engineering. As a discipline it is the science of measurement, control and automation of processes.</p> <p>Instrumentation Engineers</p> <ul style="list-style-type: none"> <li>• Design and develop equipment which monitor and control installations</li> <li>• Set up and manage control systems in manufacturing facilities, power plants, chemical plants, oil refineries, steel plants, drug manufacture, software and hardware companies etc.</li> <li>• Manage the processes in manufacturing through sensing, monitoring and controlling variables</li> </ul>

		Post graduation (M. Tech)	<ul style="list-style-type: none"> <li>• Undertake projects for installation of new control systems and processes in manufacturing</li> <li>• Plan new installations with optimal use of resources, time and costs, and in line with laid down health and safety standards</li> <li>• Research, design, manufacture devices or systems that are used to measure or control physical quantities such as temperature, pressure etc</li> </ul>
37	Interior Designer	<p>Std. XII (Stream:ScPCM)</p> <p>Selection Test (CEPT (Interior Design))</p> <p>Graduation (<u>Interior Design</u>)</p>	<p>Interior designers work with architects to plan the layout of interiors for optimum utilisation of area, for creating spaces for functionality as well as utility. Interior decorators on the other hand plan colour schemes, furniture, furnishings, decorations and arrangements.</p> <p>Interior designers</p> <ul style="list-style-type: none"> <li>• Plan interior spaces, ventilation, electrical circuits and installations, drainage and water supply, air-conditioning and heating systems etc. They work on the basis of technical knowledge of building and structures</li> <li>• They prepare layout plans, elevations, perspectives and even prepare sample models, keep themselves updated about the latest materials and products available in the market for interiors.</li> </ul>
38	Journalist	<p>Std. XII (Stream: Any)</p> <p>Graduation (Bachelor in <u>Journalism</u>)</p> <p>Apprenticeship (Newspaper/Periodicals)</p>	<p>Journalism is the business of giving news. Journalists work for newspapers, magazines, regional dailies, the electronic medium, websites and for government &amp; public sector publications. The print medium holds an important role in our lives, providing the latest news and acting as a forum for addressing public issues and grievances.</p> <ul style="list-style-type: none"> <li>• Journalists are assigned to cover political issues, law and order, sports, education, local affairs and the like. Journalists may be assigned to specific 'beats' to cover all happenings in that area</li> </ul>

			<ul style="list-style-type: none"> <li>• They cover news stories, national and local events to inform it's readers what is happening where, why and how</li> <li>• The main job entails witnessing events and reporting in a style which influences people to react to the changing scene</li> <li>• The local reporter, the national affairs correspondent, the foreign correspondent, sports, travel and other specialist writers all go outside the office to collect information and file news reports.</li> </ul>
39	Lawyer	<p>Std. XII (Stream: Any)</p> <p>Graduation (Any)</p> <p>Law Course (<u>LLB</u>(3 year)&gt;<u>LLM</u>/Dip)</p>	<p>Lawyers are authorized by the state to advise and defend clients in legal matters before the court. Law establishes the rules that define a person's rights and obligations and defines their enforcement.</p> <p>Lawyers act as advocates and advisors</p> <ul style="list-style-type: none"> <li>• As advocates, they represent one of the opposing parties in criminal and civil trials in court, cross examine witnesses and finally sum up the reasons why the court should decide in their clients' favour</li> <li>• As advisors they counsel their clients about legal rights and obligations</li> <li>• They research laws applicable to the case at hand and previous judgements under circumstances similar to those currently faced by the client.</li> </ul>
40	Manufacturing Engineer	<p>Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p>	<p>Manufacturing Engineers work for a wide range of manufacturing firms. They take responsibility for technical functions and maintenance of production lines and also manage development of new production lines.</p> <p>Manufacturing Engineers</p> <ul style="list-style-type: none"> <li>• Ensure smooth, cost effective production and high performance in the industry</li> <li>• Prepare plans and instructions for the manufacturing process</li> </ul>

			<ul style="list-style-type: none"> <li>• Set the functions on the machines on the shop floor to operate with precision in the production process</li> <li>• Supervise fabricators on the shop floor</li> <li>• Give detailed directions for efficiency in completion of the production process</li> <li>• Troubleshoot problems on the production line and manage repair and maintenance</li> <li>• Test new equipment and machinery to authenticate it for the production process</li> <li>• Purchase and install new machiner</li> </ul>
41	Marine Engineer	<p>Std. XII (Stream: ScPCM)</p> <p>Entrance ( JEE Main)</p> <p>Degree/ Training (Naval Engineering College)</p>	<p>Marine engineers design, construct, maintain and repair all types of sea-going vessels and structures used at sea.</p> <p>Marine Engineers</p> <ul style="list-style-type: none"> <li>• Are in charge of the engine room on a ship</li> <li>• Inspect marine equipment and machinery on the ship to work out job specifications for maintenance staff</li> <li>• Plan and manage the construction of all types of ships such as passenger ships, sailboats, aircraft carriers, cargo ships, oil and gas tankers, battle ships, submarines etc.</li> <li>• Make detailed drafts and schematic drawings of system layouts, cost estimate and time schedules. Submit proposal to the management for approval</li> <li>• Design, build, and test propulsion and steering systems, mechanical and electrical systems, cooling and ventilation systems and hydraulics for the ship</li> <li>• Supervise the work progress to check the work is being done as per specifications and within the time and cost plan</li> <li>• Prepare technical reports for managers, engineers and sales in charge</li> <li>• Coordinate with regulatory bodies for compliance with</li> </ul>

			standards <ul style="list-style-type: none"> <li>• Lead trial team aboard the ship and take corrective steps</li> </ul>
42	Mobile App Developer	<p>Path 1</p> <p>Std. XII (Stream: ScPCM)</p> <p>Graduation (<u>B.Sc/B.E/B. Tech</u>)</p> <p>Training/PG (Training M. Ssc/M.E Comp SC)</p> <p>Path 2</p> <p>Std. XII(Stream:ScPCM)</p> <p>Graduation (<u>BCA/MCA</u>)</p> <p>Internship</p>	<p>A mobile application is software devised for mobile and smart phones. Apps are in high demand and developers are producing applications for multiple services and businesses. Simple examples are a dictionary or something similar to a Google Maps navigation app or a simple flashlight or voice recorder. Mobile applications are designed for infotainment and entertainment.</p> <p>Mobile App Developers</p> <ul style="list-style-type: none"> <li>• Work on specifications and use their experience in developing apps specific to the platform/ operating systems which would run it</li> <li>• Write code for apps for specific operating systems</li> <li>• Work with analysts, project managers, software engineers and other app developers</li> <li>• Test and improve the app to ensure quality and functionality to suit the client's requirements</li> <li>• Design and develop the apps interface</li> <li>• Provide support for the app, and trouble shoot offering solutions or workarounds</li> </ul>
43	Naval Officer	<p>Std. XII (Stream: Science PCM)</p> <p>Competitive (NDA entrance test)</p> <p>Training (NDA &amp; Naval Academy)</p>	<p>The Navy protects and safeguards the country's exclusive economic zone, the ocean resources and the coasts from any invasion. Navy consists of the combat fleet, support ships, personnel, training establishments and the land bases. It has patrol boats, torpedo crafts ( for patrolling and safeguarding coastal regions), warships, aircraft carriers, cruisers, destroyers, frigates and submarines. Support ships, also known as auxiliary ships, provide them with fuel, rations, armament repair facilities and various other services. The officers and sailors are trained to</p>

			<p>meet the challenge at sea.</p> <p>The Navy</p> <ul style="list-style-type: none"> <li>• Protects and safeguards the country's exclusive economic zone, the ocean resources and the coasts from any invasion</li> <li>• Controls the sea in war</li> <li>• During invasion, navy attacks enemy coastal defences.</li> </ul>
44	Nurse	<p>Std. XII (Stream: Science: PCB)</p> <p>Graduation (<u>B. ScNursing</u>)</p>	<p>Nursing forms the largest group of professionals who work in the health sector. Their job involves giving bedside care to convalescing patients, attending to newborns, to assisting physicians during examination and operation of patients.</p> <p>Hospital nurses constitute by far the largest group. Their responsibilities are:</p> <ul style="list-style-type: none"> <li>• Assisting physicians during examination and operation of patients</li> <li>• Bedside care of convalescing patients</li> <li>• They record temperature and pulse rate</li> <li>• Administer medication orally and hypodermically injections</li> <li>• Change dressings</li> <li>• Assist patient in personal care</li> <li>• Maintain patients treatment record, temperature, respiration, pulse rate, nourishment, progress etc</li> <li>• Nurses observe patient s condition closely and report the progress to the physicians</li> <li>• They prepare patients for examination or operation and help to maintain a healthy and hygienic environment</li> </ul>
45	Ophthalmologist	<p>Std. XII (Stream: Sc PCB)</p> <p>Entrance Exam (NEET-UG)</p> <p>Graduation (<u>MBBS</u>)</p> <p>PG Entry &amp; Course (NEET-</p>	<p>Ophthalmologists are medical professionals who specialize in the diagnosis, treatment, prevention, and management of medical conditions affecting the eye and visual pathways.</p> <p>Ophthalmologists</p> <ul style="list-style-type: none"> <li>• Conduct routine eye exams, retinal screening and</li> </ul>

		PG/CET-DNB>MS)	<p>diagnose systemic eye diseases caused by medical conditions such as diabetes, hypertension, malignancy, etc.</p> <ul style="list-style-type: none"> <li>• Treat all medical and surgical conditions of the eye</li> <li>• Diagnose and treat infections, cataract, ocular inflammation, etc.</li> <li>• Treat injuries in and around the eyes</li> <li>• Use a range of medical equipment such as lasers, ophthalmoscopes, microscope, retinoscopy etc. to diagnose and treat ophthalmic problem</li> </ul>
46	Petroleum Engineer	<p>Path 1 Std. XII (Stream: Science)</p> <p>Entrance exam (JEE)</p> <p>BE/B. Tech</p> <p>Path 2 Std. XII (Stream: Science)</p> <p>Entrance&gt;Degree (IIT&gt;BE/B. Tech)</p> <p>Selection (GATE)</p> <p>Post graduation (M. Tech)</p>	<p>Petroleum Engineers work in drilling oil wells, safe and economical recovery of oil and natural gas, development and processing of petroleum, and management of the production process.</p> <p>Petroleum Engineers</p> <ul style="list-style-type: none"> <li>• Are involved in the several activities involved in the recovery of oil and natural gas</li> <li>• Develop drilling plans, ascertain the commercial viability of exploration of an oil well</li> <li>• Work in specialist capacities as reservoir engineer, drilling engineer, production engineer</li> <li>• As reservoir engineers they estimate the best methods of oil exploration from oil reservoir to ensure commercial productivity</li> <li>• As drilling engineers they work with the geoscientists to design drilling operations, determine the drilling procedure and supervise the process of drilling.</li> </ul>
47	Pharmacist	<p>Std. XII(Science: PCM/B)</p> <p>Graduation (<u>B. Pharma</u> 4 years)</p> <p>Selection (GPAT)</p>	<p>Pharmacists understand the composition &amp; effect of drugs and how they are tested for purity &amp; strength, and eventual use for prevention &amp; treatment of disease.</p> <p>Pharmacists work in four areas:</p> <ul style="list-style-type: none"> <li>• Hospital pharmacy</li> </ul>

		PG>PhD ( <u>M. Pharma</u> )	<ul style="list-style-type: none"> <li>• Retail pharmacy</li> <li>• Industrial pharmacy</li> <li>• Research pharmacy</li> </ul>
48	Police Officer	<p>Std. XII (Stream: Any)</p> <p>Graduation (Any discipline)</p> <p>Selection ( Test &amp; Physical Fitness)</p> <p>Training &amp; Post (Asst Sub Inspector)</p>	<p>Police officers are responsible for public safety, maintaining law and order, prevention of crime and enforcement of law. Every state appoints and maintains a police force for prevention of crime, maintenance and enforcement of law and order in the state.</p> <p>Police Officers</p> <ul style="list-style-type: none"> <li>• Are trained to manage the law and order at all times</li> <li>• Take responsibility for managing large congregations at public events</li> <li>• Direct and regulate traffic and enforce traffic rules</li> <li>• Carry out day and night time patrolling in their beats</li> <li>• Provide security and prevent crime in parks, streets and festival or political gatherings</li> <li>• Provide security to public officials and public during riots</li> <li>• Carry out rescue operations in the event of an emergency situation</li> <li>• Respond to emergency call from the public on a given helpline</li> <li>• Track and apprehend criminals, collect evidence and identify witnesses</li> <li>• Work in police stations to record criminal activities and take action</li> </ul>
49	Product Manager	<p>Std. XII (Stream: Any)</p> <p>Graduation Any</p> <p>Experience</p> <p>Post Graduate (<u>MBA</u>)</p>	<p>Product Managers are in charge of managing the entire development of a product or an entire brand. They create new products, make strategies based on market research, determine the pricing, plan the marketing, set goals for sales etc.</p> <ul style="list-style-type: none"> <li>• Take complete responsibility for the launch of a product/</li> </ul>

			<p>brand and like a CEO manage the life cycle of a particular product, or even an entire brand</p> <ul style="list-style-type: none"> <li>• Develop high-performance project teams</li> <li>• Take responsibility for positioning a product, assess the competition and make strategies for its future</li> <li>• They use critical business planning, communication, negotiation, and execution skills</li> <li>• They begin by understanding the consumer's mind, and the relationship between consumer behaviour and a brand</li> <li>• Direct market research and consumer feedback</li> <li>• Handle all the extensive information and strategize</li> <li>• Coordinate with all departments of a business, including finance, communications, marketing, research and development, and even the supply chain and drive execution across organizational divisions</li> </ul>
50	Radio and TV anchor	<p>Std. XII (Stream: Any )</p> <p>Graduation (Any subject)</p> <p>Training (Public speaking/Anchoring)</p>	<p>Radio and Television anchors conduct live programs. They present news, commercial messages and announcements following a script.</p> <ul style="list-style-type: none"> <li>• Transmit news, commentary, music or announcements through radio and television networks</li> <li>• Introduce videotaped news or live transmission from on the scene reporters</li> <li>• Announce or host radio and television programs</li> <li>• Announce slots for sports anchors</li> <li>• Announce slots for weather news anchors</li> <li>• Announce commercial breaks</li> <li>• Interview guests</li> <li>• Play recorded music interspersed with scheduled or spontaneous announcements of city happenings, weather, time, news or just ads and are known as disc jockeys</li> </ul>

51	Robotics Engineer	<p>Std. XII (Stream:ScPCM)</p> <p>Entrance Test (JEE)</p> <p>Graduation (BE/B. Tech )</p> <p>Post graduation (ME/PhD)</p>	<p>Robotic Engineers design and maintain robots. They are constantly engaged in research to develop new designs and expand their potential.</p> <p>Robotic Engineers</p> <ul style="list-style-type: none"> <li>• Design experimental robotic models</li> <li>• Design production line robots with programmable arms</li> <li>• Maintain and upgrade older production line installations</li> <li>• Anticipate needs in new sectors and design robots with new applications</li> <li>• Carry out regular checks on existing robotic models</li> <li>• Find robotic applications in varied fields such as mining, ocean exploration, nano-technology, surgery, modern warfare and space-exploration</li> <li>• Specialise in robotic field of study e.g Automation, Micro-Robotics, Robot Motion Planning, Signal Processing, Robot Manipulators, Artificial Intelligence, CAD, CAM, Bio-cybernetics etc</li> </ul>
52	Surgeon	<p>Std. XII (Stream: PCB)</p> <p>Entrance test (NEET-UG &gt; <u>MBBS</u>(5½ yrs)..)</p>	<p>Surgeons are medical professionals trained in surgical procedures for the treatment of injuries, fractures, cancers, tumors, deformities and a variety of medical problems.</p> <p>Surgeons</p> <ul style="list-style-type: none"> <li>• Work as general surgeons and use surgical instruments to operate on patients diagnosed with a disease, deformity, physical injury etc.</li> <li>• Specialize in any of the following super specialities :- neurological surgery, orthopedic surgery(treatment of musculoskeletal conditions), cardiothoracic surgery( treatment of heart and related conditions), pediatric surgery( treatment of surgical conditions in infants and children), gastrointestinal surgery , gynecology and obstetrics , surgical oncology, ophthalmic surgery, plastic and reconstructive surgery etc.</li> </ul>

			<ul style="list-style-type: none"> <li>• Examine patients , prescribe diagnostic tests and interpret test results to plan the required surgical procedure</li> <li>• Advise their patients and family about the surgery which the patient would undergo</li> <li>• Carry out surgical procedures on patient who is under anesthesia</li> <li>• Attend to patients in post-surgical care to check on the healing of wounds and advice on post-operative care</li> </ul>
53	System Analyst	<p>Std. XII (Stream: PCM)</p> <p>Graduation (<u>B.E/B. Tech/BCA</u>)</p> <p>Post Graduation (<u>M.E/M. Tech/MCA/MIS</u>)</p>	<p>System Analysts are qualified IT professionals who diagnose problems in an organization's computer systems and make changes to ensure operational efficiency.</p> <p>Systems Analysts</p> <ul style="list-style-type: none"> <li>• Consult with the management to understand IT systems in use in an organization</li> <li>• Examine IT systems and identify the problems encountered by users</li> <li>• Determine if changes in hardware or software are required to increase organizational efficiency</li> <li>• Prepare financial estimates and specifications for the upgrade in computer systems with details of the hardware and software required</li> <li>• Make recommendations to the management for their approval</li> <li>• Work along with IT staff to install, configure and customize the IT system</li> <li>• Check the efficiency of the IT system by conducting tests</li> <li>• Train users, write instruction manuals and get feedback from end users.</li> </ul>
54	Textile Designer	<p>Std. XII (Stream: Any)</p> <p>Entrance (NIFT/NID)</p> <p>B. Design (<u>Textile Designing</u>)</p>	<p>Textile design comprises both fabric design and structural design. Textile designers handle textile or embroidery designs, prints, weaves, styles and textures.</p> <p>Textile designers are trained in fabric printing, dyeing,</p>

		Entrance>M. Des (NIFT/NID Textile Design)	<p>embroidery and design development. They work as design developers, color specialists, hand painters and printing supervisors. With the knowledge of the history of textile fibers, and expertise in various methods of how textile looms operate they know how yarns of different types can be blended.</p> <p>Textile designers</p> <ul style="list-style-type: none"> <li>• Carry out design research</li> <li>• Keep abreast with current fashion trends</li> <li>• Study fabric durability, weight, texture, etc.</li> <li>• Designs are created to suit the market</li> <li>• Prepare rough sketches to outline basic ideas</li> <li>• Transfer sketches to detailed technical specifications. The construction of designs is presented on graph paper or through CAD (computer aided design) systems to the production team</li> <li>• Samples are made</li> <li>• Work in liaison with technicians and technologists for making necessary adjustments to the designs.</li> </ul>
54	Web Designer	<p>Path 1</p> <p>Std. XII (Stream ScPCM)</p> <p>Graduation (<u>B.Sc/ B.E</u>)</p> <p>Certification (Web Designing)</p> <p>Path 2</p> <p>Std. XII (Stream: Any)</p> <p>Graduation (Design Degree/Dip)</p> <p>Certification (Web design)</p>	<p>Web designers design web pages, websites and web applications for businesses, firms, organizations, industry or government to establish their identity for their online community. Web Designing is the process which allows visitors to access the web pages at one platform with several images, texts, links, graphics etc.</p> <ul style="list-style-type: none"> <li>• Work on a brief from the management or client</li> <li>• Employ several technical skill sets in the production and maintenance of web sites</li> <li>• Collaborate with copywriters, webmasters and marketing managers</li> <li>• Harness their skill in graphic design, interface design, standardized code and proprietary software, user experience design and search engine optimization</li> </ul>

			<ul style="list-style-type: none"><li>• Ensure a good design for the look, layout and the overall impact of a website</li><li>• Solve browser compatibility issues and handle extensions and common gateway issues etc.</li></ul>
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**NOTE:** The data given in this pdf archive is just for educational/Informational purposes and is liable to change.

Data might be change/ refresh without take note whenever required.