Details of Courses Offered at Government Aided & Privately Managed Institutes

Affiliated to Board of Technical Education, Delhi

4.1 INFORMATION ABOUT VARIOUS COURSES

4.1.1 APPIED ART (Offered at Apeejay Institute of Design)

The three year diploma in Applied Art focuses on development of creative ability and understanding of human psychology in different media and professional skills through study of subjects like Basic Design, Lettering & Typography, Press Layout, Poster Design, Illustration, Computer Graphics, Elementary Knowledge of Photography, Sketching, Study of Life/Nature and objects. Diploma holders from this department can choose to work as Graphic Designer in government organizations, advertising agencies, design studio, publishing houses, TV channels, art and craft teacher and can also work as freelance artist.

4.1.2. ARCHITECTURAL ASSISTANTSHIP (Offered at Chhotu Ram Rural Institute of Technology)

This three years diploma course develops students into architectural professionals. The syllabus has been revised as per current industry requirements. The architectural professionals organize spaces and design houses, office buildings, skyscrapers, landscapes, and even design interior and execute projects. They are trained in many areas like designing & constructional aspects, climate and environment considerations, building services, bylaws, graphics and rendering material usage and importantly working on municipal drawings. Besides they are taught surveying, basic structural design and inputs for running and managing offices. They are also given deep insights into relevant computer software usage, model making etc. They may be involved with designing the total built environment from how a building integrates with its surrounding landscape to architectural construction details that involve the interior of the buildings. This training may lead to a wide variety of job opportunities like Job in Govt. departments, MNCs, and Private Architect's office etc. They may go for higher studies also.

4.1.3 ART FOR DRAWING TEACHERS (Offered at Sarada Ukil School of Art)

After obtaining three years Diploma in Art for Drawing Teachers, the candidates may have job opportunities as Art/Drawing Teachers in the Senior Secondary Schools, Government of Delhi, MCD, NDMC and Public Schools as well as Artist in the Govt. Department and Advertising Agencies.

4.1.4 AUTOMOBILE ENGINEERING (Offered at Guru Teg Bahadur Polytechnic Institute)

Automobile Engineering, being an advanced and emerging area of technology, has shown an unprecedented growth due to the increasing demand of automotive vehicles. A conscious attempt has been made to design the three years Diploma course as per the requirement of the industry. Specific core subjects on Automobiles are being taught besides basic sciences and allied subjects. Eight weeks of industrial training for the students has been made an integral part of the curriculum whereby students can correlate their theoretical knowledge with the practical approach of problem solving. The Department of Automobile Engineering has well-equipped laboratories and workshops. Placement opportunities are more for Automobile diploma holders as Delhi and NCR are hub of automobiles industries. Even Transport Department, Roadways & various Govt. organizations demand Automobile diploma holders.

4.1.5   CIVIL ENGINEERING (Offered at Chhotu Ram Rural Institute of Technology)

Curriculum for Civil Engineering has been designed for catering to the current as well as future needs of the Civil Engineering applications, such as Surveying, Concrete Technology, Soil Mechanics, Transport Engineering, Public Health and Environment Engineering, Computer Aided Design and Valuation with a view to generate the required competency profile of the diploma holders after the completion of the Diploma.

4.1.6   COMPUTER ENGINEERING (Offered at Aditya Institute of Technology, Guru Teg Bahadur Polytechnic Institute)

Computer Engineering, an advanced and emerging area of technology has shown an unprecedented growth in every sphere of activity. A conscious attempt has been made to design the curriculum as per the requirement and need of the industry. Elective subjects like Object Oriented Programming (OOP), Data Base Management System (DBMS), Multi Media, etc. are being taught besides basic sciences and allied subjects. Industrial training and project have been made an integral part of the curriculum to enable the students to correlate their theoretical knowledge with the practical approach of problem solving. With equal importance given to hardware and software subject, most of the institutes maintain well-equipped and modernized DBMS Lab, Multi Media and Networking Lab with Internet facility, software lab, CAD lab and Hardware lab. After successful completion of the course, students can secure jobs as Software Engineer, Network Engineer, Programmer, Hardware Engineer, Maintenance Engineer, System Analyst etc.

4.1.7   ELECTRICAL ENGINEERING (Offered at CR)

This course has been designed to provide practical and theoretical knowledge of conventional and emerging areas of electrical engineering with emphasis on electronics and software engineering. Most of the institutes have well-established laboratories that include electrical machine lab, electronics, electrical workshop, instrumentation and measurement lab, computer lab etc. After completion of the course, students are able to work in the areas like production of machines, installation, maintenance and servicing of electrical systems. The students are employed in areas that include Electrical power generation, transmission, Railways, Installation & Commissioning of power equipment, SCADA (Supervisory Control and Data Acquisition) etc. The students are equally placed in Computer hardware and Electronics sectors.

4.1.8   ELECTRONICS& COMMUNICATION ENGINEERING (Offered at Aditya Institute of Technology, Guru Teg Bahadur Polytechnic Institute & Chhotu Ram Rural Institute of Technology)

Electronics and Communication is now a part of our everyday life, from our pocket FM radio to televisions, computers, mobile phones and even high-end satellites that are helping us in every path. This course has been designed to provide in-depth knowledge of theory & practical in the emerging & latest areas of electronics that include communication system, advanced communication, microprocessor, telecommunication, mobile communication, internet technologies etc. This course aims at making the students capable of testing & using different electronic devices, fabricating & maintaining professional and medical instruments, making and interpreting technical drawings, maintaining communication systems, understanding industrial processes and communicating effectively. After the completion of the course, students become eligible to get jobs in Electronics, Communication & Computer industries as technicians, supervisors, production engineers, sales & service Engineers etc. The Diploma holders can become successful entrepreneurs in the field of repair and maintenance of electronic items.

4.1.9 DIGITAL ELECTRONICS (Offered at Chhotu Ram Rural Institute of Technology) MEDICAL ELECTRONICS (Offered at Chhotu Ram Rural Institute of Technology)

Diploma in Electronics with specialization have been defined and designed to meet the challenges of continuous technological changes and sound knowledge of latest areas. Various elective subjects like Advanced Microprocessor, Digital System Design, Microprocessor based System Design, Communication Engineering, Principles of Instrumentation and Transducers, Product Design and Development, Imaging Techniques and Medical Electronics are offered. Departments maintain well-equipped and well-established labs for different electronics and allied subjects e.g., Digital and Microprocessor Lab, Medical Electronics Lab, Communication Lab, Project Lab etc. Facility to undertake project related activities with industry has been made an integral part of curriculum, which enables students to develop skills and know the work culture of an industry. After successful completion of the course, students are absorbed as technicians in the fields like production, customer support, servicing, development, sales and marketing, in various reputed companies like Tata Consultancy Services, C-Dot, Siemens, Tektronics, Philips etc.

4.1.10 FASHION DESIGN (Offered at International Polytechnic for Women *Only for Girls &* Apeejay Institute of Design)

The Diploma in Fashion Design helps students to develop the technical expertise and theoretical knowledge about fashion and apparel design industries. The Diploma in Fashion Design offers intensive training in fashion design processes including basics of textile, concept of design, fashion illustration, design development pattern development, draping, grading, marker planning, computer aided designing, garment construction, production management, quality control, project preparation and presentation, fashion retailing, apparel merchandising etc. The students shall undergo the industrial training in various activities of fashion designing and processes of apparel manufacturing. After completion of the diploma, students are able to work in the different position in the fashion industry such as fashion coordinator, fashion illustrator, fashion merchandiser, fashion forecaster, costume designer etc.

4.1.11 INFORMATION TECHNOLOGY ENABLED SERVICES & MANAGEMENT (Offered at Aditya Institute of Technology)

Diploma in ITES & M has been designed to meet the growing need of KPOs, BPOs and other organizations providing IT Enabled Services. Course Content has been designed to fill the vacuum between academics, Computers and IT Enabled Service Sector. Department develops professional competency in students by combining theory with exhaustive practical training. Communication Skills have been given due importance. Elective subjects like IT Laws and Patents, Cyber Crimes, Computer Graphics and Multimedia are being taught besides basic science and core subjects. Department maintains well equipped and modern labs like DBMS, Computer Networking, Multimedia, Software Lab, Web Site Designing Lab, Hardware Lab, English Language Lab. After successful completion of the programme, students can secure jobs at various levels like Programmer, Web Designer, Network Administrator, System Administrator and Database Administrator in KPOs, BPOs and other industries providing IT Enabled Services.

4.1.12 INSTRUMENTATION & CONTROL ENGINEERING (Offered at Chhotu Ram Rural Institute of Technology)

This Diploma course has been started with a view to train students in the emerging industries of India, using new areas like Petro Chemical Engineering, Manufacturing Engineering, and Aviation etc. All engineering industries connected with above areas have to rely on instruments for measurement & instrumentation, quality control, calibration & testing etc and these are very much essential to set up any industry. To cope - up with the modernization of Indian industry and quality control, the syllabus and objectives of teaching have been formulated to encompass the areas of computers, manufacturing engineering, robotics and industrial automation, which are now important areas of the curriculum.

4.1.13 INTERIOR DESIGN (Offered at Apeejay Institute of Design)

Interior Design is an advanced and emerging area with a high employment potential because of an unprecedented consciousness and an urge for good living in the modern society with the availability and awareness of new materials and technologies in the field of interior design.

A conscious effort has been made to design this three-year diploma course as per needs of the industry. The course content includes CAD training on computers using the latest software, workshop practice in carpentry, fitting, welding, painting and polishing. Six weeks industrial training is an integral part of the course. To enhance the entrepreneurial skills and generate self-employment specific subjects like Entrepreneurship and Elements of Business Management are being taught apart from basic subjects related to the field of Interior Design. Thus, the students are also prepared for self-employment.

4.1.14 MECHANICAL ENGINEERING (Offered at Chhotu Ram Rural Institute of Technology)

The Mechanical Engineering department has well equipped labs conforming to the norms and standards laid down by the AICTE. These include thermal engineering lab, strength of materials lab, Fluid mechanics and machines lab, Materials and Metallurgy lab. CAD lab. etc.The departments comprise of various categories of Mechanical workshops that includes Welding, foundry, fitting, carpentry, painting, sheet metal and machine shops which are equipped with some of the latest & most sophisticated machines & tools like CNC machine, all geared central lathe, HMT lathe machine, Sigma milling machine, tool grinder etc. Industrial Training has been made an integral part of the curriculum.

4.1.15 MEDICAL LABORATORY TECHNOLOGY (Offered at Aditya Institute of Technology & Baba Hari Dass College of Pharmacy)

Diploma programme in Medical Laboratory Technology primarily aims at imparting training to enable the students to conduct various examinations on body fluids/ tissues and prepare reports. They are also taught to use, manage different laboratories and maintain equipment used in the clinical labs of the hospitals, to communicate effectively with doctors, patients and representatives of business organizations. A diploma holder can be appointed as a laboratory technician in laboratories of various departments in medical colleges, hospitals and private laboratories. They can also join pharmaceutical concerns.

4.1.16 PHARMACY (Offered at Baba Hari Dass College of Pharmacy and Subramania Barathi College of Science &Technology)

Diploma course in Pharmacy imparts knowledge of manufacturing, synthesis, mode of action, uses and toxic effects of medicine. It deals with the study of medicinally important drugs from natural sources. A practical training of 500 hours in different hospitals and dispensaries is given to students after completion of two years course. Then they are registered as Pharmacist. The trained diploma holders are absorbed in pharmaceutical companies as marketing personnel or as pharmacists in hospitals, dispensaries, health centers and different pharmaceutical organizations.

4.1.17 TEXTILE DESIGN   (Offered at International Polytechnic for Women Only *for Girls*)

This course enables the students to explore drawing, color imagery, and surface pattern through a wide range of print processes. Creative solutions are designed for a diverse range of fashion and interior applications. The course has a business-oriented focus with emphasis on retail management in the final year of study. Modules in buying, marketing and visual merchandising developed research, written and oral presentation skills. CAD is an integral part of the course. Workshops are equipped with traditional looms to explore design a concept using weave and knits. The students can pursue careers as house designer's stylists, free-lance designers, visual merchandisers and retail managers in the textile mills, in design studios with fashion designers. They can work independently as entrepreneurs.