



**MSME-Technology Centre**

**इलेक्ट्रॉनिक्स सेवा और प्रशिक्षण केंद्र**

**Electronics Service & Training Centre**

A Govt of India Society-Micro, Small & Medium Enterprises

Kaniya, Ramnagar, Distt-Nainital(Uttarakhand)-244715



ISO 9001:2015

**Approved by AICTE**

Affiliated to Uttarakhand Board of Technical Education,  
Roorkee

**ESTC POLYTECHNIC  
RAMNAGAR**

**PROSPECTUS**

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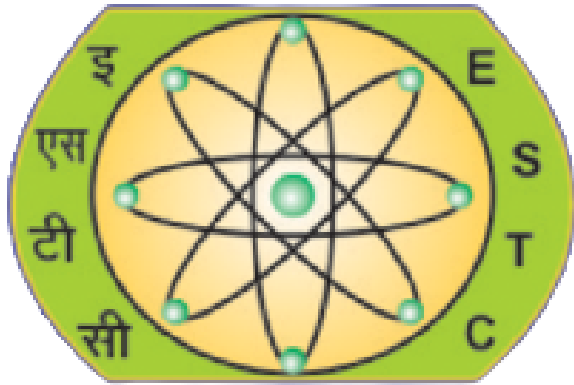


## ABOUT US

Electronics Service & Training Centre (ESTC) Ramnagar operating since 1989 in the area of Mechanical, Electrical, Electronics, IT related Skill development & consultancy for Aspiring / Existing MSMEs with the state-of-the-art infrastructure & experienced faculties. With the Approval of AICTE & Affiliation to UBTER, ESTC offers 3 years of Diploma courses in Mechanical Engineering, Electrical Engineering and Computer Science and Engineering.

# Introduction

## Training for Skill Development & Capacity Building of Man Powers



**ISO 9001:2015**

### ESTC is providing services in the following areas:

1. Training for Skill Development & Capacity Building of Man Power in various domains.
2. ESTC facilities are available to entrepreneurs, Research institutions & commercial organizations on nominal charges.
3. Electrical & Mechanical testing of products.
4. ESTC conducts regular training programs, seminars/workshops on various topics related to electronics / IT/ entrepreneurship development etc. We also conduct tailor-made training programs at on-campus / off campus
5. Design & Development of Prototype Products.
6. Tool Design & Documentation.
7. Manufacturing of Tools, Jigs & Fixtures, Critical Components, and Precision jobs.
8. Batch Production services
9. Consultancy services for Laboratory accreditation as per ISO/IEC 17025.
10. Consultancy services for QMS certification as per ISO 9001.
11. Many More Services for MSME's.

1. ESTC has been devoted to Technical Manpower Development particularly from “Industrial Sector” & “Information Technology Sector”
2. Skill Development Training is a continuous education & is required by every Practicing Professional and Student for improving his/her competency to meet the greater demands & challenges of Industry.
3. ESTC is not only giving classroom training but it is also supported by various Laboratories for complete hands-on experience.
4. ESTC faculty members are well qualified & having immense practical experiences, profound insights, and broad perspectives and are ready to part tips, tricks and techniques gained.
5. We always ensure that every participant carries back home a lot of clarity & confidence on the subject through Theory, Practical, Demonstrations, Role Play, Live Projects etc. This enhances the work performance of participants & thereby fulfilling our objective of Skill Development.
6. ESTC "Skill – Development Training Programmes" has built in the potential to generate Employment or a possibility to start working independently as a Self-Entrepreneur.
7. ESTC is also conducting the Capacity Building Training Program for Principals, Faculty members & Senior officers with a main focus on Behavior Science through several Soft Skills like Inter Personnel Skills, HR Management, Communication & Presentation skills, Leadership, Decision making, Team Building, Stress & Conflict Management etc.
8. ESTC is also conducting various Sponsored Training Programmes for various states of Ministries/Departments.

# FACILITIES

## ELECTRICAL LAB



## MECHANICAL LAB



## COMPUTER LAB



# LIBRARY



# CLASSROOM



# AUDITORIUM



# PLACEMENT ROOM



# PLAYGROUND



# HOSTEL



# DIPLOMA ENGINEERING COURSES

## MECHANICAL ENGINEERING

### COURSE HIGHLIGHT

- A Diploma course in Mechanical Engineering deals with the application of principles of mechanical systems.
- Diploma in Mechanical Engineering is a discipline that deals with the application of the concepts of physics and science for designing, manufacturing and maintenance of mechanical equipment's.
- The purpose of offering a Diploma in Mechanical Engineering course is to provide education and training to students who can work as professionals in industries and production companies in future.

Duration	03 Years
Eligibility	Min. 10th with 35%
Intake	60 (As approved by AICTE/State Govt.)
Pattern of the Examination	Semester System
Assessment Type	The assessment will be carried out through credit point system/Learning Based Out comes
Theory & Practical Ratio	50: 50
Industrial Training	Included after II nd Semester
Ecology & Environment	As per Government Directions a subject named Environmental Science & Energy Management has been included.
Entrepreneurship Development	A subject on Entrepreneurship Development has been incorporated after IInd Semester.
General Proficiency	A provision of 6 periods per week has been made. It Included of various co-curricular activities like games, hobby clubs, seminars, declamation contests, extension lectures, NCC, NSS, cultural activities and discipline etc.

# DIPLOMA ENGINEERING COURSES

## ELECTRICAL ENGINEERING

### COURSE HIGHLIGHT

- Diploma in Electrical Engineering is a three-year programme where the students are taught about the application of electromagnetism, electronics, and electricity.
- Electrical engineering is one such specialization under the umbrella of engineering which deals with the study of electrical power generation, equipment, and their design.
- After completion of this course, it provides wide opportunities for students in Private as well as government enterprises

Duration	03 Years
Eligibility	Min. 10th with 35%
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# DIPLOMA ENGINEERING COURSES

## Computer Science and Engineering

### COURSE HIGHLIGHT

- A Diploma course in Computer Science and Engineering deals with an IT professional with proficiency in various aspects of the field like software development, data management, computer programming system development, network development, web platform development, data analysis, system design and so on
- The purpose of offering a Diploma in Computer Science and Engineering course is to provide education and training to students who can work as professionals in industries and software companies in future.

Duration	03 Years
Eligibility	Min. 10th with 35%
Intake	60 (As approved by AICTE/State Govt.)
Pattern of the Examination	Semester System
Assessment Type	The assessment will be carried out through credit point system/Learning Based Out comes
Theory & Practical Ratio	50: 50
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# SYLLABUS- 1st Year

Common for all branch

## Semester-1

- 1.991001-English And Communication Skills-I
- 2.991002-Applied Mathematics-I
- 3.991003-Applied Physics-I
- 4.991004-Applied Chemistry-I
- 5.991005-Computer Fundamental
- 6.991006-Engineering Drawing-I
- 7.991007-General Workshop Practice-1
- 8.991051-General Proficiency
- 9.991052-Industrial Exposure  
(Assignment At Institute Level)

## Semester-2nd

- 1.992001-English And Communication Skills-II
- 2.992002-Applied Mathematics-II
- 3.992003-Applied Physics-II
- 4.992004-Applied Chemistry-II
- 5.992005-Environment Science & Energy  
Management
- 6.992006-Engineering Graphics-I
- 7.992007-General Workshop Practice-II
- 8.992051-General Proficiency
- 9.992052-Industrial Exposure  
(Assignment At Institute Level)

# BRANCH NAME- ELECTRICAL ENGINEERING



## Semester-3rd

- 1.083001-Electrical And Electronics Engineering Materials
- 2.083002-Electrical Workshop Practice
- 3.083006-Fundamentals Of Mechanical And Civil Engineering
- 4.083003-Electrical Measurement And Measuring Instruments
- 5.083004- Electronics Devices And Circuits
- 6.083005 -Fundamentals Of Electrical Engineering
- 7.014054-General Proficiency

## Semester-5th

1. 085001- A.C Machines
- 2.085005- Sub-Station , Switchgear and Protection
- 3.085003- Installation and Maintenance of Electrical Equipments
- 4.085002- Energy Management
5. 085004- Industrial Electronics and Control of Drives
6. 085006- Entrepreneurship Development and Management (E)
- 7.085052- Industrial Exposure (Assessment at Institute Level) +
- 8.015054- General Proficiency #
- 9.085053- Industrial Training

## Semester-4th

- 1.084001- Electrical Engineering Design and Drawing
2. 084002- D.C Machines and Transformers
- 3.084003- Digital Electronics and Microprocessors
4. 084006- Generation, Transmission and Distribution of Electrical Power
- 5.084004- Electrical Circuits and Analysis
- 6.084005- Estimating and Costing in Electrical Engineering
- 7.084052- Industrial Exposure (Assessment at Institute Level) +
8. 014054- General Proficiency
- 9.084053- Industrial Training

## Semester-6th

- 1.086004- Utilization of Electrical Energy
- 2.086001- Non-Conventional Energy Sources
- 3.086003- SCADA, PLC & Microcontrollers
- 4.086002- Application of Computer Software in Electrical Engineering
- 5.086005- Project Work
6. 086052- Industrial Exposure (Assessment at Institute Level)+
- 7.016054- General Proficiency #
- 8.016055- Employability Skills

# BRANCH NAME- MECHANICAL ENGINEERING



## Semester-3rd

1. 143001- Basic Electrical & Electronics Technology
2. 143002-Material Science & Metallurgy 143003 - Machine Drawing
3. 143004 -Thermodynamics
4. 143005 -Workshop Technology
5. 143006 -Applied Mechanics
6. 013054 -General Proficiency

## Semester-5th

1. 145003-Dynamics of Machine
2. 145004-Machine Design
3. 145002-Production Management
4. 14500- CNC Machine and Automation
5. 145005-Maintenance Engineering\*
6. 145052-Industrial Exposure
7. 145053-Industrial training
8. 015054-General Proficiency

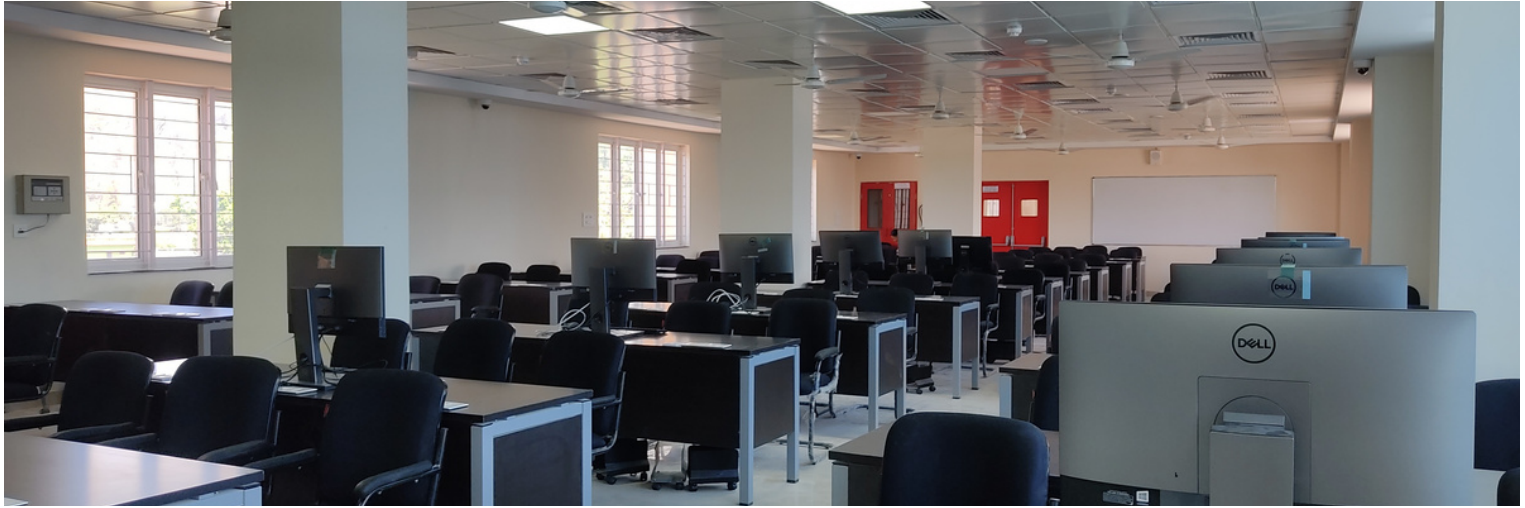
## Semester-4th

1. 144006-Strength of Materials
2. 144004-Metrology, Instrumentation & Control
3. 144005-Production Technology
4. 144003-Hydraulics and Hydraulic Machines
5. 144001-Applied Thermal Engineering
6. 144002 -Automobile Engineering
7. 144052-Industrial exposure  
(Assessment at Institute Level)
8. 014054-General Proficiency
9. 144053-Industrial Training

## Semester-6th

1. 136001-Entrepreneurship Development and Management\*
2. 146001-Computer Application in Mechanical drafting Design and Analysis
3. 146004-Non Conventional Energy Resources.
4. 146003-Refrigeration and Air Conditioning\*\*
5. 146002-Power Plant Engineering\*\*
6. 146005 -Project Work
7. 146052- Industrial Exposure
8. 016054 -General Proficiency
9. 016055- Employability Skills

# BRANCH NAME- COMPUTER SCIENCE AND ENGINEERING



## Semester-3rd

- 1.053006- Programming in C
- 2.053003- Digital Techniques
- 3.053005- Operating System
- 4.053001 Internet of Things
- 5.053002- Data Communication
- 6.053004- Office Application
- 7.053052- Industrial Exposure  
(Assessment at Inst. Level)+
8. 013054- General Proficiency #

## Semester-4th

- 1.054003 Data Structure Using C
- 2.054006 Object-Oriented Concepts
- 3.054004 Internet and Web Technology
- 4.054005 Relational Data Base Management System
5. 054002 Computer System Organization and Architecture
- 6.054001 Computer Network and Security
- 7.054052 Industrial Exposure  
(Assessment at Inst. Level)+
- 8.014054 General Proficiency #
- 9.054053 Industrial Training

## Semester-5th

- 1.055002- Software Engineering
2. 055004- Android Application Development
- 3.055001- Java Programming
- 4.055003- Computer Hardware and Servicing
- 5.055005- Minor Project Work
6. 055052- Industrial Exposure  
(Assessment at Inst. Level) +
7. 055053- Industrial Training
8. 015054- General Proficiency #

## Semester-6th

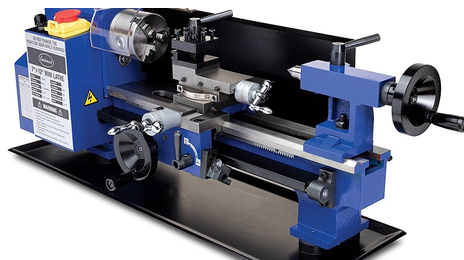
- 1.056003 Multimedia System
- 2.056001 Concept of .Net Technology
- 3.056002 Data Mining & Warehousing
- 4.056004 Open Source Technology
5. 056005 Major Project
- 6.056052 Industrial Exposure  
(Assessment at Inst. Level) +
- 7.016054 General Proficiency #
- 8.016055 Employability Skills

# COURSE ELIGIBILITY

GROUP	COURSE NAME	COURSE DURATION	ELIGIBILITY
E	Diploma in Engineering	Three years	Pass 10th or equivalent examination with Science & Mathematics Subjects. Obtain minimum 35% marks in examination.
A (Lateral Entry)	Diploma in Engineering	Two years	Pass 10+2 with PCM/ ITI (2 years)/ 10+2 with vocational/technical subjects
			<p style="text-align: center;"><b>ITI</b></p> <p>For Mechanical Engineering: Fitter/Turner/ Refrigeration and Air Condition Mechanic/Draftsman Mechanic</p> <p>For Electrical Engineering: Electrician/Wireman</p>

## Mode of Admission

- JEEP Entrance Exam (Institute Code-164)
- Management Quota



# GENERAL RULES & REGULATIONS

**Course Hours:** 6 hours per day (excluding lunch), As per Academic Calendar

**Attendance:** It is compulsory to attain 80% attendance for appearing semester and final exam in all the courses.

**Original Certificate:** Original certificates of school leaving certificate and mark sheet of 10th standard (caste certificate for reserved candidates) are to be deposited with ESTC POLYTECHNIC Ramnagar by the candidates at the time of admission, which will be returned after completion of the course only.

**Institute Security Deposit:** Institute Security Deposit is to be paid towards the caution money against the tools & instruments, etc. whichever will be issued to the students. This amount is refundable at the time of leaving after completion of course and on production of no dues from the concerned sections.

**Uniform & Safety Shoes:** Students shall be required to wear uniform/apron & shoes as prescribed by the institute on his/her own cost.

**Course:** Total Tuition fees in two installments and caution money to be paid fully at the time of admission process.

**Holidays:** Holidays shall be observed as per Central Government during each calendar year.

**Vacation** The period of vacation will be declared at the end of the semester (There will be a variation on the duration of Vacation).

**DISCIPLINE AND PERFORMANCE:** The student is bound by the rules and regulations of ESTC POLYTECHNIC Ramnagar as laid down by the management from time to time. The students is required to strictly abide by the rules of ESTC POLYTECHNIC Ramnagar failing which disciplinary action may be taken against them. The students and his/her guardian will have to give an undertaking to this effect.

Whenever it is found necessary, ESTC POLYTECHNIC Ramnagar will take strict disciplinary action as stipulated in the rules of the ESTC POLYTECHNIC. This may amount to a warning, suspension or termination as the case warrants. In case if unsatisfactory progress of a students, the management will fix a period of probation and give notice in writing to the candidate and the guardian. In case no improvement is evident within the specific period, the admission will be terminated

# GENERAL RULES & REGULATIONS

1. ESTC POLYTECHNIC reserves the right to reject any application without assigning any reason. Incomplete applications are liable to be rejected.
2. Medium of instructions is English & Hindi.
3. Course Fee is non-refundable, in case any candidate cancels his/her admission for any reason
4. Course fee once paid will not refunded under any circumstances.
5. Registration/course fee is non-transferable.
6. Course fee for the higher/next semester has to be paid within a week from the date of start of semester. Late fee will be charged as a fine from due date as applicable
7. All the Students will ensure discipline within the campus.
8. Students shall be required to wear uniform and shoes as prescribed by the institute and possess ID-card compulsory during course.
9. Mobiles Phone, Pen Drive, CD/DVD or any other related items are not permitted inside ESTC POLYTECHNIC Ramnagar premises.
10. Regular Attendance will have to be maintained by the students as per course schedule & 80% attendance is compulsory in all subjects individually.
11. Students will abide by the examination rules and regulations displayed on Notice Board of ESTC POLYTECHNIC Ramnagar and as amended from time to time.
12. Leave without information/permission will not be entertained.
13. Students going on leave or home during vacation should inform the Course Coordinator/Institute compulsorily.
14. All the internal assessments, assignments, evaluations will have to be attended/completed from time to time as per course schedule only.
15. No Students shall organize/conduct any meetings within the campus.
16. The machines/equipment's/furniture must be handled carefully. No act of damage to property, fine as charged to be paid by the Students.
17. Students have to ensure the proper utilization of ESTC POLYTECHNIC Ramnagar property including water and electricity usage.
18. Smoking and chewing tobacco, possessing or drinking alcoholic beverages in any form is strictly prohibited within ESTC POLYTECHNIC Ramnagar premises.
19. Study material shall be provided on extra cost as applicable.
20. Violations of above & any other rules, regulations, discipline and conduct etc. are liable.



# FEE STRUCTURE

Fee Structure	First Year	Second Year	Third Year
Tuition fee & Student Fund (As per norms of Uttarakhand of Technical Education, Roorkee)	₹32000	₹32000	₹32000
Security Amount ( Refundable)	₹2000	Nil	Nil
Personality Development Charge (One Time) <ul style="list-style-type: none"><li>• Soft Skill Development</li><li>• Placement Assistance (Online/Offline)</li><li>• Additional Skill Development</li><li>• Seminar/Workshop/Confrence</li></ul>	₹2000	Nil	Nil
<p style="text-align: right;">*Term &amp; Condition apply</p> <ul style="list-style-type: none"><li>• Hotel Charge (Exclusive Food)-₹4000/- per student</li><li>• Tuition Fee Waiver Scheme(TFW)-5% seat is allotted to students under TFW by AICTE. As per UBTER norms</li><li>• Reservation in seats for SC/ST, Women, EWS and PH is applicable as per rule.</li><li>• No Transport Available</li><li>• Uniform/Dress Code will be Informed Separated</li></ul>			



# ANTI-RAGGING CAMPAIGN



ESTC POLYTECHNIC Ramnagar has been able to maintain a "Ragging Free Campus" over the years. In our endeavours for ensuring the same, we have received invaluable support from the students and their guardians. Today, ragging has become synonymous with teasing, terror, harassment, cruelty, fear, physical and mental torture and abuse of the human rights of freshers which is resulting in numerous avoidable deaths, suicides, group clashes/conflicts and a large number of fresher dropouts. ESTC considers ragging as a cognizable and heinous offence and does not hesitate to take stern action against the offenders with a view to maintaining a "Ragging Free Campus".

## **The definition and punishment for the ragging are given as under :**

1. Any conduct by any student or students, whether by a word spoken or written or by an act, which has the effect of teasing, treating or handling with rudeness a fresher or any other student.
2. Exploiting students for completing academic tasks and financial extortion.
3. Any act of physical abuse including all its variants - sexual abuse, homosexual assaults, and stripping, forcing obscene and lewd acts, gestures, causing bodily harm or any other danger to the health of a person.
4. Any act that prevents disrupts or disturbs the regular academic activity of other students.
5. Punishment For Ragging :

## **Some of the punishments for students directly or indirectly involved in the ragging and its abetment are given as under :**

1. Cancellation of Admission
2. Suspension from attending classes.
3. Withholding/withdrawing of scholarship/fellowship and other benefits.
4. Debarring from appearing for any test/examination/placement activities organized by the institute.
5. Withholding of results.
6. Lodging FIR against the offender.
7. Debarring from representing the institution in any National or International meet, tournament or festival.
8. Suspension / Expulsion from the hostel.
9. Rustication from the institute for varying periods.
10. Expulsion from the institution and consequent debarring from admission to any other institution.
11. Fine up to Rs. 2,50,000/- (up to 2.5 Lakh)
12. Rigorous Imprisonment for up to 3 years (under a court of law).

## **Approval**

(F.No. 37-3/Legal/AICTE/2009 dated 01/07/2009)

[www.antiragging.in](http://www.antiragging.in)

# OUR RECRUITERS



**HITACHI**  
Inspire the Next

 Hitachi Astemo

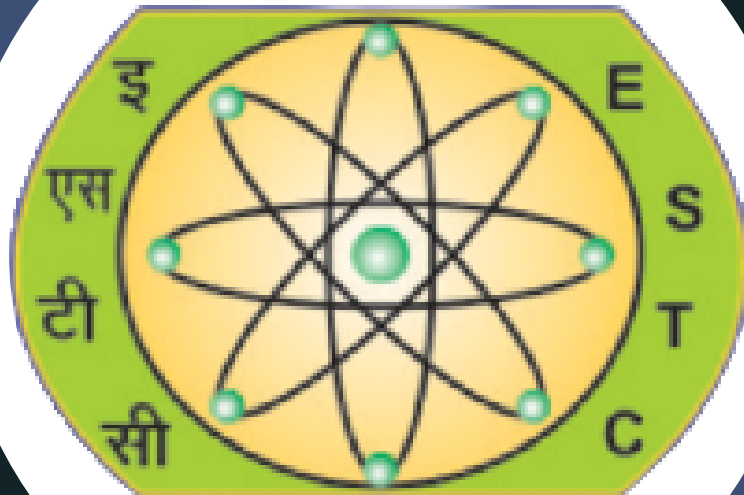


HINDUSTAN ZINC



# ESTC POLYTECHNIC RAMNAGAR

Autonomous Organization under Ministry of MSME, Government of India  
ESTC Campus, Kaniya, Ramnagar, Nainital, Uttarakhand, -244715, India



ISO 9001:2015



6399000708



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[www.estcindia.com/polytechnic](http://www.estcindia.com/polytechnic)

BOOKLET ₹ = 50/-