DIRECTORATE of ADMISSIONS and COMPETITIVE EXAMINATIONS
University of Kashmir
NAAC Accredited Grade "A+"

ADMISSION NOTIFICATION No. 01 of 2025
For Working Professional to
B.Tech Programme (through Lateral Entry)

On-Line Applications are invited from **eligible working professional candidates** for admission to B.Tech Programme through Lateral Entry mode to 3rd Semester for the session-2025 in the below mentioned disciplines offered at SSM College of Engineering, Parihaspora, Pattan, Baramulla .

- **Civil Engineering**
- **Electrical Engineering**
- **Mechanical Engineering**

i) Important dates:

Issuance of On-line Application Forms	**05-02-2025**
Last date of submission of On-line Application Forms including deposition of Entrance Test Fee	**15-02-2025**

ii) Eligibility:

The candidates should have passed the 3-year Diploma in relevant branch with at least 45% marks in case of general category and 40% marks in case of reserved category.

iii) Admission Criteria:

The admission will be made on the basis of score obtained in the Entrance Test comprising of Objective Type Questions, to be conducted by University of Kashmir.
Syllabus of the Entrance Test is available on the website www.kashmiruniversity.net

iv) Submission of On-Line Application Form:

The candidates are advised to follow the below steps for filling their On-Line Application Forms.

Step-1: Visit http://www.kashmiruniversity.net or www.kashmiruniversity.ac.in and click on Link **Admissions Window and click on link Application Form for B.Tech/BE Lateral Entry.**

Step-2: Candidate need to enter their Registration No. and click.

Step-3: Fill in the required details including academic details and Upload your latest passport size Photograph and Click Next

Step-4: Select the desired Programme and preference.

Step-5: Preview the Form displayed on the screen. If details are correct, click on Submit. If there is any variation click on previous button, make corrections and then Submit. Get a printout of the Form and note the Form No. for future reference.

Step-6: Deposit the Application Fee of **Rs. 250/-** (including IT fee of Rs. 150) plus Entrance Test Fee of **Rs. 500/- i.e. Rs. 750/- through Online mode only.**

v) Submission of downloaded Application Forms (Hard copy):

The candidates after submitting their On-Line Application Form need not to submit the downloaded Form (hard copy) instead they shall retain the hard copy for future reference. However, if the candidate got selected, he/she had to submit all the required documents/certificates in original for verification and further necessary action. In case of any misinformation or the certificates/documents found invalid or incomplete in any respect, his/her admission to the programme shall be cancelled and he/she shall be subjected to legal action.

vi) For further information please go through the enclosed Notification issued in this regard by Assistant Registrar (Academic), University of Kashmir

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Sd/-
Prof. Fayaz Ahmad
Director
Directorate of Admissions &
Competitive Examinations

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No F (B.Tech-L.E- W.P-2025) DACE/KU/25
Dated: 03-02-2025

UNIVERSITY OF KASHMIR, SRINAGAR

NAAC Accredited Grade-A⁺

Notification

It is notified for the information of all concerned that the Vice-Chancellor has authorized the following Regulations/Guidelines related to admission, conduct of academic work and examination of B.Tech prorgamme for working professionals at the University's affiliated SSM College of Engineering & Technology, Parihaspora, Pattan:-

I. Admission:

Applications for the programme shall only be invited by University of Kashmir and selection made through an Entrance Test on the pattern of Lateral Entry Mode admission.

II. Eligibility:

Eligibility shall be same as that for Lateral Entry admission viz; candidates having passed 3-year Diploma in relevant branch with at least 45% marks in case of general category and 40% marks in case of reserved category.

III. Conduct of Classes:

SSM College of Engineering & Technology shall conduct the classes in the evening hours/ flexible convenient timings i.e, during Sundays, other holidays and on working days after office hours with the condition that the weekly required minimum teaching/credit hours are achieved. The college shall have to submit a time table mentioning credit hours.

IV. The college shall mandatorily complete 60% of the syllabus in the offline mode and the candidates are allowed to earn upto 40% of the credits through MOOCs/SWAYAM as per AICTE guidelines.

V. Syllabus:

Syllabus shall be same as applicable to regular B.Tech students.

VI. Fee Structure:

The fee structure for working professionals shall be Rupees 60,000/ -(sixty thousand only) for each academic year consisting of two (02) semesters.

VII. Faculty and Staff Requirement:

Existing staff/faculty in the college with requisite qualification as per AICTE Norms shall be permitted to take classes with additional remuneration/honorarium as per the Affiliating University Norms.

VIII. Conduct of Examination:

The examination shall be conducted by the Controller of Examinations, University of Kashmir as per the set norms.

Assistant Registrar
Academic

No:- F(Admission-WP) Acad/KU/24
Date:- 04-09-2024

Copy to:

1. Dean, Academic Affairs, University of Kashmir;
2. Dean, Research, University of Kashmir, Srinagar;
3. Dean ,College Development Council, University of Kashmir;
4. Deans of the Schools of University of Kashmir;
5. Heads of all Teaching Departments, University of Kashmir;
6. Directors of various Research Centres/Institutes, University of Kashmir;
7. Director, South Campus, Anantnag/North Campus, Baramullah. University of Kashmir;
8. Director, Directorate of Admissions & Competitive Examinations; University of Kashmir;
9. Controller of Examinations, University of Kashmir;
10. Principal SSM College of Engineering & Technology, Parihaspora, Pattan.
11. Director, IT&SS, University of Kashmir;
12. Spl.Sec.to Vice-Chancellor for kind information of the Vice-Chancellor; University of Kashmir, Srinagar
13. Asstt.Registrar/Asstt. Controller, Registration/Examination Conduct/Tabulation/Certificates/Secrecy ,University of Kashmir,
14. P. S to Registrar for information of the Registrar;
15. File.

Syllabus for Lateral Entry Common Entrance Test for Admission to 3rd Semester in B.E./B. Tech. Programme, University of Kashmir, Effective from Academic Session 2016

1. Mathematics
Differential Equations:
Solution in Series. Partial differential equations of first order and higher order Lagrange's Linear Equations. Homogenous Linear equation with constant coefficients, non-homogenous linear differential equations. Applications of partial differential equations, Heat Flow Equation. Wave equation. Solution by methods of Separation of Variables.

2. Physics
Phase Space and thermodynamic probability. Boltzmann distribution and Maxwell's distribution. Black-body radiation; Stefan's Law, Ray-Leigh-Jeans Law and ultraviolet catastrophe; Wiens Displacement Law and Planck's Law. Compton effect, uncertainty relation and its applications. Schrodinger equation and its application to One dimensional problem-Simple harmonic oscillator. Bohr's quantization condition and its application to material oscillators.

3. Chemistry
i) Molecular Structure and Bonding: The VSEPR model, Valence bond theory, molecular orbital theory, molecular orbital theory of solids, semiconductors
ii) High Polymers: Monomers and their function. Polymer definition. Classification of Polymers. Constituents of Plastics, thermosetting and thermoplastic resins, silicones and their industrial applications. Natural Rubber, Vulcanization and uses of rubber
iii) Probes (Tools) for Structural Elucidation: Molecular Absorption Spectroscopy, Chronophers. Magnetic Resonance Spectroscopy-Principles and application to simple molecules and Introduction to Photoelectron Spectroscopy
iv) Lubricants: Lubrication mechanism, classification of Lubricants semisolid and liquid lubricants, viscosity and viscosity index criteria for selection of Lubricants for specific purposes.

4. Machine Drawing and Engineering Graphics
Types of Sections. Standard Sectioning Practices. Representation of screw threads, various types of screw threads, lacking devices. Foundation Bolts. Types of Bearings. Journal bearings. Pivot bearings. Thrust bearings. Ball bearings. Working drawing with the help of computer software link, AutoCAD. Engineering graphics Technical drawing-a Visual Science, Types of engineering Drawing. Theory of Projections: Relevance of Projection. Theory of Projections, Perspective, Orthographic. Axonometric and their basic principles, systems of orthographic projection. Illustration of simple problems of Projection.

5. Basics of Electrical Engineering
Electric circuit parameters (Resistance, Conductance, Inductance, Capacitance, Reactance, Impedance), Ideal and practical voltage and current sources and their transformation, dependent Sources, Power and energy relations. Resistors: color coding, Types, circuit model, Variable Resistor Types, potentiometers and rheostats, Power Rating. Ohm's law. Series and Parallel combinations of resistance, Voltage and current Dividers, Kirchhoff's current law (KCL) and Kirchhoff's voltage law (KVL). Analysis of series parallel D.C.

Circuits. Alternating Voltage & Current: (Signal, Parameters, Generation, Applications, non-sinusoidal A.C.'s, EMF Equations, Mean, Average, RMS, Peak, Form Factor).

6. Basics of Electronics Engineering

Energy bands and charge carriers in semiconductors: energy bands- metals semiconductors and insulators- direct and indirect semiconductors- charge carriers in semiconductors: electrons and holes- intrinsic and extrinsic material - n-material and p-material - carrier concentration. Diodes: volt-ampere characteristics- capacitance of p-n junctions. Diode as circuit element. Half wave, full wave Rectifiers: Centre Tapped and bridge rectifiers- working- analysis and design- C filter analysis- Zener and avalanche breakdown- Zener diodes: volt-ampere characteristics-bipolar junction transistors NPN and PNP transistor action- open circuited transistor biasing in active region- majority and minority carrier distribution- terminal currents- operation characteristics- Types of Transistor Configurations: - CE, CB and CC configurations.

7. Basics of Computation and Computer Programming

Hardware Organization of Computer, Central Processing unit, Memory, Types of Primary memory, Secondary Storage Devices and their types, Input Devices and their types, Output Devices and their Types. Various types of ports and their specifications and usage. Computer Software & its various types, Types of system and application software. File and directory operations on Windows, DOS and Linux Operating System. Types of Programming Languages: Machine Level, Assembly level, and High Level language. Algorithms, Flow-charts. Compilation, Assembling, Linking and Loading, Testing and Debugging. Introduction to C Language, Character set, Variables and Identifiers, Built-in Data Types, Variable Definition, Arithmetic operators and Expressions, Constants and Literals, Simple assignment statement, Basic input/output statement. Conditional Statements: Decision making within a program, Conditions, Relational Operators, Logical Connectives, if statement, if-else statement. Loops: while loop, do while, for loop, Nested loops, Infinite loops, Switch statement, structured Programming.

8. Basics of Engineering Mechanics

Stress and Strain: Concept of Stress and Strain, Simple Stresses, Tensile, Compressive, Shear, Bending and Torsion, Stress-Strain Curves, Elongation of bars, Composite bars, Thermal Stresses, Elastic Constants, Concept of C.G. and Centroid, Position of Centroid, Theorem of Parallel and Perpendicular Axes, Moment of inertia of simple geometrical figures.