



## Coursework [WPI Transcript](#) | [UrFU Transcript](#)

Selected coursework is tabulated below. Official transcripts are linked above to view courses.

**Abbreviations:** GR = Graduate, UG = Undergraduate, WPI = Worcester Polytechnic Institute, UrFU = Ural Federal University

| Topic Group                                 | Topic  | Level | Institution | Grade |
|---|--|-------|-------------|-------|
| <b>Engineering</b><br>Electrical & Computer | Modeling & Synthesis of Digital Systems Using Verilog & VHDL | GR    | WPI         | A     |
|   | Methodologies for System Level Design & Modeling             | GR    | WPI         | A     |
|   | Computer Architecture  | GR    | WPI         | A     |
|   | Theory of Electrical Engineering (3 courses)                 | GR    | UrFU        | A     |
|   | Physical Foundations of Electronics                          | GR    | UrFU        | A     |
|   | Analog Electronics   | GR    | UrFU        | A     |
|   | Digital Electronics  | GR    | UrFU        | A     |
|   | Pulse Electronics  | GR    | UrFU        | A     |
|   | Microprocessor Engineering                                   | GR    | UrFU        | A     |
|   | Microprocessor Systems                                       | GR    | UrFU        | A     |
|   | Electronics & Automation (2 courses)                         | GR    | UrFU        | A     |
|   | Computer Aided Design (CAD) in Electrical Engineering        | GR    | UrFU        | A     |
|   | Control Theory   | GR    | UrFU        | A     |
| <b>Computer Science</b>                     | Design of Software Systems                                   | GR    | WPI         | A     |
|   | Machine Learning for Engineering Applications                | GR    | WPI         | A     |
|   | Foundations of Computer Science                              | GR    | UrFU        | A     |
|   | Information Technology                                       | GR    | UrFU        | A     |
|   | Computer Networks & Systems                                  | GR    | UrFU        | A     |
| <b>Mathematics</b><br>Pure                  | Mathematical Analysis  | GR    | UrFU        | A     |
|   | Complex Variable Functions                                   | GR    | UrFU        | A     |
|   | Linear Algebra   | GR    | UrFU        | A     |
|   | Vector Algebra & Geometry                                    | GR    | UrFU        | A     |
|   | Vector Analysis  | GR    | UrFU        | A     |
|   | Differential Equations & Series                              | GR    | UrFU        | A     |
|   | Probability & Statistics                                     | GR    | UrFU        | A     |
| <b>Mathematics</b><br>Applied               | Numerical Methods of Analysis                                | GR    | UrFU        | A     |
|   | Methods of Mathematical Physics                              | GR    | UrFU        | A     |
|   | Equations of Mathematical Physics                            | GR    | UrFU        | A     |
| <b>Cryptography</b>                         | Advanced Cryptography  | GR    | WPI         | A     |
|   | Blockchain & Cryptocurrencies                                | GR    | WPI         | A     |
| <b>Natural Science</b><br>Physics           | General Physics  | GR    | UrFU        | A     |
|   | Solid-State Physics  | GR    | UrFU        | A     |
|   | Electrodynamics  | GR    | UrFU        | A     |
|   | Thermodynamics & Statistical Physics                         | GR    | UrFU        | A     |
|   | Theoretical Mechanics  | GR    | UrFU        | A     |
|   | Quantum Mechanics  | GR    | UrFU        | A     |
|   | Atomic & Nuclear Physics (3 courses)                         | GR    | UrFU        | A     |
|   | Radiation Sources  | GR    | UrFU        | A     |
|   | Nuclear Spectrometry   | GR    | UrFU        | A     |
|   | Radiometry & Dosimetry: Methods & Techniques                 | GR    | UrFU        | A     |
| <b>Engineering</b><br>Materials             | General Chemistry (Inorganic & Organic)                      | GR    | UrFU        | A     |
|   | Materials Science  | GR    | UrFU        | A     |
|   | Strength of Materials  | GR    | UrFU        | A     |
|   | Machine Parts & Principles of Designing                      | GR    | UrFU        | A     |
|   | Engineering Graphics   | GR    | UrFU        | A     |
|   | Computer Aided Design (CAD) in Mechanical Engineering        | GR    | UrFU        | A     |
|   | Metrology, Standardization & Certification                   | GR    | UrFU        | A     |
| <b>Management</b><br>Business/Economics     | Economic Theory  | GR    | UrFU        | A     |
|   | Enterprise Economy   | GR    | UrFU        | A     |
|   | Management & Marketing                                       | GR    | UrFU        | A     |