

| Course Code | Course Name   | TAC   | ECTS |
|-------------|---|-------|------|
|             |   |       |      |
| İNS501      | MSc. Seminar  | 0     | 6    |
| İNS599      | MSc. Thesis   | 0     | 24   |
| İNS503      | Theoretical Fundamentals of Urbanization                            | 3-0-3 | 6    |
| İNS504      | Architecture-City Planning-Environment                              | 3-0-3 | 6    |
| İNS505      | Binders and Technology  | 3-0-3 | 6    |
| İNS506      | Aggregate Analysis and Technology                                   | 3-0-3 | 6    |
| İNS507      | Analysis of Concrete Behaviors                                      | 3-0-3 | 6    |
| İNS508      | New Products and Technologies in Construction Materials             | 3-0-3 | 6    |
| İNS509      | Computer Aided Statistical Analysis                                 | 3-0-3 | 6    |
| İNS510      | Advanced Highway Techniques   | 3-0-3 | 6    |
| İNS511      | Concrete Construction Elements                                      | 3-0-3 | 6    |
| İNS512      | Special Concretes   | 3-0-3 | 6    |
| İNS513      | Calculation Methods of Concrete Composition                         | 3-0-3 | 6    |
| İNS514      | Advanced Building Constructor's Supply Shed Planning and Techniques | 3-0-3 | 6    |
| İNS515      | Analysis of Concrete Construction Elements                          | 3-0-3 | 6    |
| İNS516      | Sound Control and Noise in The Building                             | 3-0-3 | 6    |
| İNS517      | Hydraulic Structures  | 3-0-3 | 6    |
| İNS518      | Water Insulation at Buildings                                       | 3-0-3 | 6    |
| İNS519      | Experimental Methods in Buildings                                   | 3-0-3 | 6    |
| İNS520      | Advanced Topography   | 3-0-3 | 6    |
| İNS521      | Construction Chemicals  | 3-0-3 | 6    |
| İNS522      | Plasticity Analysis of Steel Constructions                          | 3-0-3 | 6    |
| İNS523      | Advanced Construction Materials Science                             | 3-0-3 | 6    |
| İNS524      | Basement Mechanics and Analysis in Buildings                        | 3-0-3 | 6    |
| İNS525      | Construction Biology  | 3-0-3 | 6    |
| İNS574      | Seismic Isolation Methods in Buildings                              | 3-0-3 | 6    |
| İNS527      | Structural Damages  | 3-0-3 | 6    |
| İNS576      | Safety in Road Design   | 3-0-3 | 6    |
| İNS575      | Introduction to Transportation Engineering and Planning             | 3-0-3 | 6    |
| İNS530      | Using of Prefabrication Elements in Construction Elements           | 3-0-3 | 6    |
| İNS531      | Computer Aided Analysis of Construction Elements                    | 3-0-3 | 6    |
| İNS532      | The Dimensioning Principles of Stone Construction                   | 3-0-3 | 6    |
| İNS533      | Pre and Post Stressed Concrete Applications                         | 3-0-3 | 6    |
| İNS534      | Security Control at Building  | 3-0-3 | 6    |
| İNS535      | Pozzalanic Materials  | 3-0-3 | 6    |
| İNS578      | Structure Analysis of Performance Based                             | 3-0-3 | 6    |
| İNS577      | Basic Safety Precautions, Equipment and Equipments                  | 3-0-3 | 6    |
| İNS538      | Glass And Ceramics Construction Materials                           | 3-0-3 | 6    |
| İNS539      | Cost Of Poor Quality at Construction                                | 3-0-3 | 6    |
| İNS540      | Reinforcement Corrosion in Structure                                | 3-0-3 | 6    |
| İNS541      | Rules of Reinforce of Reinforced Concrete                           | 3-0-3 | 6    |
| İNS542      | Solar Radiation and Building Design                                 | 3-0-3 | 6    |
| İNS543      | Orientation of Urban and Buildings                                  | 3-0-3 | 6    |
| İNS544      | Basics of Advanced Building Physics                                 | 3-0-3 | 6    |

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| İNS545 | Material Defects in Structural Damages and Repairing Principals     | 3-0-3 | 6 |
| İNS546 | Durability Experiments  | 3-0-3 | 6 |
| İNS547 | Fiber Concrete and General Characteristics                          | 3-0-3 | 6 |
| İNS548 | Destructive and Non-Destructive Concrete Experiments and Evaluation | 3-0-3 | 6 |
| İNS549 | Persistence in Reinforced Concrete Structures                       | 3-0-3 | 6 |
| İNS550 | Cement Chemistry  | 3-0-3 | 6 |
| İNS551 | Concrete Morphology   | 3-0-3 | 6 |
| İNS552 | Usage of Industrial Wastes in Concrete                              | 3-0-3 | 6 |
| İNS553 | Excell Applications in Civil Engineering                            | 3-0-3 | 6 |
| İNS554 | Loose Boundary Hydraulics   | 3-0-3 | 6 |
| İNS555 | Physical Models and Measurements                                    | 3-0-3 | 6 |
| İNS556 | Flood Control   | 3-0-3 | 6 |
| İNS557 | Hydrology of Droughts and Floods                                    | 3-0-3 | 6 |
| İNS558 | Hydrologic Modelling with Remote Sensing and GIS                    | 3-0-3 | 6 |
| İNS559 | Water Resources Systems   | 3-0-3 | 6 |
| İNS560 | Water Law and Policy  | 3-0-3 | 6 |
| İNS561 | Hydrologic Models   | 3-0-3 | 6 |
| İNS562 | Applied Statistical Methods in Civil Engineering                    | 3-0-3 | 6 |
| İNS563 | Urban Drainage  | 3-0-3 | 6 |
| İNS564 | Fuzzy Logic Modeling in Engineering                                 | 3-0-3 | 6 |
| İNS565 | Basin Hydrology   | 3-0-3 | 6 |
| İNS566 | Hydroclimatology  | 3-0-3 | 6 |
| İNS567 | Hillslope Hydrology   | 3-0-3 | 6 |
| İNS568 | Experimental Methods in Geotechnic                                  | 3-0-3 | 6 |
| İNS573 | Active and Passive Control Methods in Constructions                 | 3-0-3 | 6 |
| İNS570 | Ground Behaviour  | 3-0-3 | 6 |
| İNS571 | Bearing Capacity Theory in Geotechnic                               | 3-0-3 | 6 |
| İNS572 | Experimental Methods in Earthquake Engineering                      | 3-0-3 | 6 |
| İNS604 | Civil Defese and Sanctuary Buildings                                | 3-0-3 | 6 |
| İNS606 | Using of geosynthetics in geotechnic practice                       | 3-0-3 | 6 |
| İNS607 | Bioharmological building design                                     | 3-0-3 | 6 |
| İNS608 | Fracture mechanics of engineering materials                         | 3-0-3 | 6 |
| İNS609 | Nonlinear vibrations  | 3-0-3 | 6 |
| İNS610 | Nonlinear analysis of structural systems                            | 3-0-3 | 6 |
| İNS611 | Finite element methods  | 3-0-3 | 6 |
| İNS612 | Plasticity theory   | 3-0-3 | 6 |
| İNS613 | Displacement-based design of structures                             | 3-0-3 | 6 |
| İNS614 | Computer computational modeling of building materials               | 3-0-3 | 6 |
| İNS615 | Change methods  | 3-0-3 | 6 |
| İNS616 | Nonlinear behavior of reinforced concrete building elements         | 3-0-3 | 6 |
| İNS617 | Damage mechanics  | 3-0-3 | 6 |
| İNS618 | Optimization methods in building design                             | 3-0-3 | 6 |
| İNS619 | Material modeling   | 3-0-3 | 6 |
| İNS620 | Behavioral models in reinforced concrete                            | 3-0-3 | 6 |
| İNS621 | Stability theory  | 3-0-3 | 6 |
| İNS622 | Advanced structure dynamics   | 3-0-3 | 6 |
| İNS623 | Composite materials in construction                                 | 3-0-3 | 6 |

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| İNS624 | Sustainable building technologies                       | 3-0-3 | 6  |
| İNS625 | Geopolymer concrete                                     | 3-0-3 | 6  |
| İNS626 | Plate theory  | 3-0-3 | 6  |
| İNS627 | Stochastic Processes in Hydrology                       | 3-0-3 | 6  |
| İNS603 | Urban Transformation Process                            | 3-0-3 | 6  |
| İNS630 | Turbulence models                                       | 3-0-3 | 6  |
| İNS631 | Quality management in construction projects             | 3-0-3 | 6  |
| İNS632 | Operations research in transportation                   | 3-0-3 | 6  |
| İNS633 | Stations-station buildings-terminals                    | 3-0-3 | 6  |
| İNS634 | Simulation applications in transportation               | 3-0-3 | 6  |
| İNS635 | Inland Waterways  | 3-0-3 | 6  |
| İNS637 | Treatment plant hydraulics                              | 3-0-3 | 6  |
| İNS638 | Drinking water treatment technology                     | 3-0-3 | 6  |
| İNS639 | Groundwater hydrology                                   | 3-0-3 | 6  |
| İNS640 | Boundary element method                                 | 3-0-3 | 6  |
| İNS643 | Solid material transport                                | 3-0-3 | 6  |
| İNS647 | Structural earthquake engineering                       | 3-0-3 | 6  |
| İNS648 | Shrinkage in concrete                                   | 3-0-3 | 6  |
| İNS649 | Creep in concrete                                       | 3-0-3 | 6  |
| İNS650 | Protection of reinforced concrete from external factors | 3-0-3 | 6  |
| İNS651 | Numerical analysis in engineering applications          | 3-0-3 | 6  |
| İNS652 | Metallic building materials                             | 3-0-3 | 6  |
| İNS653 | Modeling transportation systems                         | 3-0-3 | 6  |
| İNS654 | Special topics in advanced structural statics           | 3-0-3 | 6  |
| İNS655 | Structural fire safety                                  | 3-0-3 | 6  |
| İNS656 | Advanced strength of materials basics and equations     | 3-0-3 | 6  |
|        |   |       |    |
| İNS502 | Ph.D. Seminar   | 0     | 6  |
| İNS600 | Ph.D. Thesis  | 0     | 24 |
| İNS666 | Doctorate Qualification                                 | 0     | 24 |
| İNS528 | Advanced Wooden Construction Technique-I                | 3-0-3 | 6  |
| İNS536 | Housing Construction Systems I                          | 3-0-3 | 6  |
| İNS569 | Geotechnical Modelling                                  | 3-0-3 | 6  |
| İNS628 | Computational fluid dynamics-I                          | 3-0-3 | 6  |
| İNS641 | Analytical methods in engineering-I/                    | 3-0-3 | 6  |