

**SEVENTH SEMESTER EXAM SCHEDULE OF CE- 409 FINAL YEAR DESIGN PROJECT**

**Date: 17 December, 2025 (Wednesday)**

| Venue: Undergraduate Computer Centre-Lab 1 |                                                                                                                                      |                               |                         |               | Venue: Undergraduate Computer Centre-Lab 2 |                                                                                                   |                            |                         |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|---------------|--------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|-------------------------|
| Group No.                                  | Project Title                                                                                                                        | Name (Internal Supervisor)    | Name (Co-Supervisor)    | Time          | Group No.                                  | Project Title                                                                                     | Name (Internal Supervisor) | Name (Co-Supervisor)    |
| G-1                                        | Testing of Developed Fabrics and Adhesives in Concrete Strengthening Applications                                                    | Prof. Dr. Asad-ur-Rehman Khan | Engr. Syeda Hiba Haider | 9:00 - 9:30   | G-6                                        | Dynamic Properties of Sandy Soil from Resonant Column Test and Validation through PLAXIS Modeling | Prof. Dr. Amanullah Marri  |                         |
| G-2                                        | Numerical & Experimental Investigation on the Behaviour of TFRP Strengthened Reinforced Concrete Columns                             | Prof. Dr. Asad-ur-Rehman Khan | Engr. Ayesha Akram      | 9:30 - 10:00  | G-7                                        | Comparative Study of Proctor Compaction Methods on Cohesive Soil Strength                         | Prof. Dr. Amanullah Marri  |                         |
| G-3                                        | Evaluating Durability Properties of GFRP Bars Under Extreme Environmental Conditions                                                 | Prof. Dr. Abdul Jabbar Sangi  | Dr. Fawwad Masood       | 10:00 - 10:30 | G-8                                        | CBR Testing of Stabilized Soil and Modelling of Pavement Layers in Plaxis                         | Prof. Dr. Amanullah Marri  |                         |
| G-4                                        | Comprehensive Study of GFRP Bar Bond Behavior Using Beam End Test                                                                    | Prof. Dr. Abdul Jabbar Sangi  | Dr. Fawwad Masood       | 10:30 - 11:00 | G-9                                        | Numerical Simulations of Pile Foundations in Soft Clay Under Lateral Loading                      | Prof. Dr. Amanullah Marri  |                         |
| G-5                                        | Flexural Behaviour of Concrete Beams Reinforced with Hybrid Reinforcement                                                            | Prof. Dr. Abdul Jabbar Sangi  | Dr. Fawwad Masood       | 11:00 - 11:30 | G-10                                       | BIM-LIDAR-VR Integrated Framework for Interactive Building Maintenance                            | Prof. Dr. Farrukh Arif     | Engr. Waleed Ahmed Khan |
| G-14                                       | Estimating Parameters for Constitutive Modelling of High and Ultra-High Strength Concrete Using an Artificial Intelligence           | Prof. Dr. Shamsoun Fareed     | Dr. Fatima Khalid       | 11:30 - 12:00 | G-11                                       | BIM-Enabled Decision Support Framework for Maintenance Management of Built Asscts                 | Prof. Dr. Farrukh Arif     |                         |
| G-15                                       | Influence of Nano-Particles on Mechanical Properties of Ultra High Strength Concrete                                                 | Prof. Dr. Shamsoun Fareed     | Engr. Ayesha Ayub       | 12:00 - 12:30 | G-12                                       | Design and Constructability of a Sustainable Modular Housing Structure                            | Prof. Dr. Farrukh Arif     |                         |
| G-16                                       | Influences of Nano-Particles on the Dynamic Strength of Ultra-High Performance Concrete                                              | Prof. Dr. Shamsoun Fareed     | Engr. Ayesha Ayub       | 12:30 - 1:00  | G-13                                       | Soil Reinforcement for Pavement Using Sustainable Materials                                       | Dr. Sadaf Qasim            | Dr. Sajjad Ali          |
| Prayer and Lunch Break (1:00 - 2:00)       |                                                                                                                                      |                               |                         |               |                                            |                                                                                                   |                            |                         |
| G-17                                       | Low Cost Housing Units Using Supplementary Cementitious Materials Bamboo and Hollow Blocks                                           | Dr. Syed Salman Mobeen        | Dr. Fawwad Masood       | 2:00 - 2:30   | G-18                                       | Improving Rainfall Estimation Using Gauge Calibrated Satellite Sources                            | Engr. Haris Akram Bhatti   |                         |
| G-36                                       | Comparative Evaluation of the Effects of Potable and Contaminated Water on the Mechanical Properties of Compacted Soil               | Dr. Sadia Moin                |                         | 2:30 - 3:00   | G-22                                       | Identification of Accident Location (Black Spot) in Selected Railway Line                         | Dr. Sajjad Ali             |                         |
| G-19                                       | Rainfall Data Convergence: Integrating Satellite and Rain Gauge Estimates for Enhanced Hydrological Design                           | Engr. Haris Akram Bhatti      |                         | 3:00 - 3:30   | G-23                                       | Traffic Signal Need Assessment and Optimization for A High-Volume Congested Roundabout            | Dr. Sajjad Ali             |                         |
| G-20                                       | Seismic Risk Assessment and Retrofitting Priority of Government School Buildings in Karachi Using Field Surveys, Fragility Functions | Dr. Aslam Faqeer Mohammad     | Engr. M. Hammad         | 3:30 - 4:00   | G-25                                       | Driver Fatigue Assessment of Prevailing and Heavy Traffic Modes in Selected Urban Arterials       | Dr. Sajjad Ali             |                         |
| G-21                                       | Engineering Assessment and Structural Evaluation of a Dangerous Reinforced Concrete (RC) Building in Karachi                         | Dr. Aslam Faqeer Mohammad     |                         | 4:00 - 4:30   | G-24                                       | Location Optimization of Small Port: An Evaluation for Maritime Infrastructure Development        | Dr. Sajjad Ali             |                         |

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|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------|---------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------|
| Group No.                                   | Project Title                                                                                                                   | Name (Internal Supervisor) | Name (Co-Supervisor)          | Time          | Group No.                                  | Project Title                                                                                                                                                        | Name (Internal Supervisor) | Name (Co-Supervisor) |
| G-43                                        | Design of a Circular Economy-Green Building Principles Integrated Building Using Digital Tools                                  | Prof. Dr. Farrukh Arif     | Engr. Faiza Saeed             | 9:00 - 9:30   | G-32                                       | Re-evaluation of Kalabagh Dam's Technical and Environmental Feasibility Under Modern Climate and Socio-Political Conditions.                                         | Dr. Areba Syed             |                      |
| G-44                                        | Enhancing Building Envelope Design through Thermal Performance Assessment                                                       | Prof. Dr. Farrukh Arif     | Engr. Faiza Saeed             | 9:30 - 10:00  | G-33                                       | Hydrological Modeling of the Hub River Watershed with QGIS and SWAT+: Guiding Best Management Practices for Sustainable Agriculture and Water Use                    | Dr. Areba Syed             |                      |
| G-29                                        | Managing Construction Logistics Along the BRT Project in Karachi                                                                | Dr. Rana Rabnawaz Ahmed    | Dr. Syed Muzammil Abbas Rizvi | 10:00 - 10:30 | G-34                                       | Effect of Climate Change and Urbanization in Swat Valley                                                                                                             | Dr. Areba Syed             |                      |
| G-45                                        | 4D BIM with Construction Safety Simulation: A Case Study for Improved Site Safety                                               | Engr. Farhan Saleem        |                               | 10:30 - 11:00 | G-35                                       | Evaluation of Drinking Water Suitability in Malir District Using Drinking Water Suitability Index (DWSI) and Statistical Analysis                                    | Dr. Areba Syed             |                      |
| G-30                                        | A BIM Based Facility Management Model for Effective Maintenance of an Industrial Project                                        | Dr. Rana Rabnawaz Ahmed    | Dr. Syed Salman Mobeen        | 11:00 - 11:30 | G-39                                       | Impact of Micro Plastics on Mangrove Ecosystems along Karachi's Coastline and Its Removal by Physical, Chemical and Biological Methods                               | Dr. Mehmood Ali            |                      |
| G-31                                        | Reducing Carbon Footprint Across the Supply Chain of an Infrastructure Project                                                  | Dr. Rana Rabnawaz Ahmed    | Dr. Syed Muzammil Abbas Rizvi | 11:30 - 12:00 | G-40                                       | Solar Powered Water Heating System: Design, Implementation and Cost Comparison with Conventional Electric Heater                                                     | Dr. Mehmood Ali            |                      |
| G-46                                        | BIM - Based Proactive Delay Detection and Mitigation in Construction Projects                                                   | Dr. Rana Rabnawaz Ahmed    |                               | 12:00 - 12:30 | G-26                                       | Modelling Behavior of Transport User and Preference Towards Proposed Karachi Circular Railway (KCR)                                                                  | Engr. Syed Muhammad Noman  |                      |
| G-47                                        | Evaluating Material Recovery Potential Using Various Deconstruction Strategies: A Case Study from the Local Construction Sector | Dr. Rana Rabnawaz Ahmed    |                               | 12:30 - 1:00  | G-27                                       | Framework Development for Railway Infrastructure and Rehabilitation: A Case Study of KCR                                                                             | Engr. Syed Muhammad Noman  |                      |
| <b>Prayer and Lunch Break (1:00 - 2:00)</b> |                                                                                                                                 |                            |                               |               |                                            |                                                                                                                                                                      |                            |                      |
| G-28                                        | Public Transportation Routes Rationalization and Future Direction                                                               | Engr. Syed Muhammad Noman  | Dr. Syed Muzammil Abbas Rizvi | 2:00 - 2:30   | G-38                                       | Assessment of Micro-Plastic and Disinfectant Interactions in Tap Water: Implications on Bacterial Re-Growth, Disinfection Efficiency, and Civil Water Infrastructure | Dr. Sadia Khan             | Dr. Mehmood Ali      |
| G-37                                        | Optimization of Aggregate Grading to Reduce Cement Content in Concrete Mixtures                                                 | Prof. Dr. Atif Mustafa     | Dr. Tariq Jamil               | 2:30 - 3:00   | G-41                                       | Plant-Based Biowaste for Removal of Edible Oils from Municipal Wastewater                                                                                            | Dr. Sadia Khan             | Dr. Mehmood Ali      |
|                                             |                                                                                                                                 |                            |                               | 3:00 - 3:30   | G-42                                       | Assessment of Drinking Water Suitability in DHA Phase 8 Using Drinking Water Suitability Index (DWSI) and Statistical Analysis                                       | Dr. Sadia Khan             |                      |
|                                             |                                                                                                                                 |                            |                               | 3:30 - 4:00   |                                            |                                                                                                                                                                      |                            |                      |

*Haris*  
25/11/2025  
Mr. Haris Akram Bhatti  
FYDP Coordinator

Approved By: *Abdul Jabbar San*  
Prof. Dr. Abdul Jabbar San  
Chairman

*NB + Website*