

## Main Research Topics For KPC Scholarship 24/25

| # | Program                     | #  | Research Topic                                    |
|---|-----------------------------|----|---|
| 1 | Petroleum Eng. (Production) | 1  | Artificial lift                                   |
|   |                             | 2  | Stimulation                                       |
|   |                             | 3  | Water management                                  |
|   |                             | 4  | Production chemistry                              |
|   |                             | 5  | Sand control                                      |
|   |                             | 6  | Asphaltene  |
|   |                             | 7  | Scale and corrosion                               |
|   |                             | 8  | Well Testing                                      |
|   |                             | 9  | Multiphase Flow                                   |
|   |                             | 10 | Production Logging                                |
|   |                             | 11 | Production optimization                           |
| 2 | Petroleum Eng. (Reservoir)  | 1  | Chemical EOR                                      |
|   |                             | 2  | Thermal EOR                                       |
|   |                             | 3  | Gas EOR   |
|   |                             | 4  | Reservoir Modeling                                |
|   |                             | 5  | Formation Evaluation                              |
|   |                             | 6  | Fluid Flow In Porous Media                        |
|   |                             | 7  | Logging   |
|   |                             | 8  | Unconventional Reservoirs                         |
|   |                             | 9  | Geomechanics                                      |
|   |                             | 11 | Carbon Capture Utilization & Sequestration (CCUS) |
|   |                             | 12 | Reservoir conformance control                     |
| 3 | Petroleum Eng. (Drilling)   | 1  | Formation Damage                                  |
|   |                             | 2  | Intelligent Well Completion                       |
|   |                             | 3  | Directional Drilling                              |
|   |                             | 4  | Drilling optimization                             |
| 4 | Geology & Geophysics        | 1  | Fracture Characterization                         |
|   |                             | 2  | Formation Evaluation                              |
|   |                             | 3  | Reservoir Characterization                        |
|   |                             | 4  | Reservoir Modeling                                |
|   |                             | 5  | Unconventional Reservoirs                         |
|   |                             | 6  | Geomechanics                                      |
|   |                             | 7  | Carbon Capture Utilization & Sequestration (CCUS) |
|   |                             | 8  | Formation Damage                                  |
|   |                             | 9  | Basin Analysis and Petroleum Systems              |
|   |                             | 10 | Geochemist  |
|   |                             | 11 | Geophysics  |
| 5 | Chemical Eng. & Chemistry   | 1  | Water Management                                  |
|   |                             | 2  | Corrosion & Scale                                 |
|   |                             | 3  | Asphaltene  |
|   |                             | 4  | Process Control                                   |
|   |                             | 5  | Production Operation                              |
|   |                             | 6  | Production Chemistry                              |
|   |                             | 7  | Process Engineering                               |
|   |                             | 8  | Thermodynamics                                    |
|   |                             | 9  | Material Science                                  |
|   |                             | 10 | Energy & Sustainability                           |
| 6 | Electrical Engineering      | 1  | Artificial Intelligence                           |
|   |                             | 2  | Machine Learning                                  |
|   |                             | 3  | Digitization                                      |
|   |                             | 4  | Data Analytics                                    |
|   |                             | 5  | Automation  |
|   |                             | 6  | Quantum Computing                                 |
| 7 | Physics                     | 1  | Imaging (NMR, CT)                                 |
|   |                             | 2  | Surface Phenomena                                 |