## TOTAL COURSE-PROGRAMME OUTCOMES RELATIONSHIP

| FALL | | | | | Programme Outcomes | | | | | | | | | | | | | | | | | | | | | |
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| **Course Code** | **Course Name** | **T** | **P** | **ECTS** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | | | | | | | | | | | | | |
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| KIM5003 | Special Topics-I | 5 | 0 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5005 | Thesis Research | 0 | 1 | 20 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5007 | Seminar* | 0 | 2 | 6 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | | | | | | | | | | | | | |
| KIM5101 | Pericyclic Reactions | 2 | 0 | 6 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | | | | | | | | | | | | | |
| KIM5103 | | 2 | 0 | 6 | | | | | | | | | | | | | | | | | | | | | | |
| KIM5105 | Computer Applications in Chemistry | 2 | 0 | 6 | 3 | 4 | 4 | 5 | 5 | 3 | 3 | 5 | 4 | | | | | | | | | | | | | |
| KIM5107 | Plastic Additives-I | 2 | 0 | 6 | 5 | 5 | 4 | 3 | 5 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5109 | Synthetic Organic Chemistry-I | 2 | 0 | 6 | 5 | 4 | 5 | 5 | 3 | 4 | 5 | 3 | 4 | | | | | | | | | | | | | |
| KIM5111 | | 2 | 0 | 6 | | | | | | | | | | | | | | | | | | | | | | |
| KIM5113 | Characterization Techniques of Polymers | 2 | 0 | 6 | 5 | 5 | 5 | 4 | 5 | 4 | 3 | 5 | 5 | | | | | | | | | | | | | |
| KIM5115 | Molecular Structure and Symmetry | 3 | 0 | 8 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | | | | | | | | | | | | | |
| KIM5117 | Industrial Materials Analysis Methods | 3 | 0 | 8 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | | | | | | | | | | | | | |
| KIM5119 | Phosphorus Chemistry | 2 | 0 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5121 | Polymer Chemistry-I | 3 | 0 | 8 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 3 | | | | | | | | | | | | | |

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| KIM5123 | Specroscopic Methods | 3 | 0 | 8 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | | | | | | | | | | | | | | |
| KIM5125 | Advanced Organic Reactions | 3 | 0 | 8 | 5 | 4 | 5 | 5 | 3 | 4 | 5 | 3 | 4 | | | | | | | | | | | | | | |
| KIM5127 | Ligand Adsorption | 3 | 0 | 8 | 5 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 3 | | | | | | | | | | | | | | |
| KIM5129 | Reactive Intermediates | 3 | 0 | 8 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 3 | 2 | | | | | | | | | | | | | | |
| KIM5131 | Enzymatic Polymerization | 3 | 0 | 8 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 3 | | | | | | | | | | | | | | |
| KIM5133 | Catalysis | 3 | 0 | 8 | 5 | 4 | 5 | 3 | 5 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | |
| KIM5135 | Molecular Orbital Theory | 3 | 0 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| KIM5137 | Corrosion | 3 | 0 | 8 | 5 | 4 | 5 | 4 | 5 | 3 | 4 | 4 | 5 | | | | | | | | | | | | | | |
| KIM5139 | Electropolymerization-I | 3 | 0 | 8 | 5 | 5 | 5 | 3 | 5 | 4 | 4 | 5 | 5 | | | | | | | | | | | | | | |
| KIM5141 | Chemicial Toxicology | 3 | 0 | 8 | 5 | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 5 | | | | | | | | | | | | | | |
| KIM5143 | Technological Materials Synthesis and Characterization | 3 | 0 | 8 | 5 | 5 | 5 | 5 | 4 | 3 | 5 | 4 | 5 | | | | | | | | | | | | | | |
| KIM5145 | Principles of Inorganic Chemistry-I | 3 | 0 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| KIM5147 | Molecular Quantum Chemistry-I | 3 | 0 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| KIM5149 | Environmental Analysis in Analytical Chemistry | 3 | 0 | 8 | 5 | 5 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | | | | | | | | | | | | | | |
| KIM5151 | The Chemistry of Humic Substances | 3 | 0 | 8 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 3 | 2 | | | | | | | | | | | | | | |
| KIM5153 | İndole and Azole Chemistry | 2 | 0 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM5155 | Elektrokimyada Moleküler Modelleme | 3 | 0 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| KIM6001 | Seminar | 0 | 2 | 6 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | | | | | | | | | | | | | | |
| KIM6003 | Specialized Field Course-I | 5 | 0 | 10 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | | |

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| KIM6005 | Thesis Research | 0 | 1 | 20 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6007 | Doctoral Qualification*** | 0 | 0 | 30 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6101 | Advanced Polymer Chemistry-I | 3 | 0 | 10 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 3 | 3 | | | | | | | | | | | | | | |
| KIM6103 | Inorganic Reaction Mechanisms-I | 3 | 0 | 10 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | | | | | | | | | | | | | | |
| KIM6105 | Heterocyclic Compounds | 3 | 0 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6107 | Bioinorganic Chemistry | 3 | 0 | 10 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6109 | Thermochemical Kinetic | 3 | 0 | 10 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | | | | | | | | | | | | | | |
| KIM6111 | Theoretical Foundations of Analytical Chemistry-I | 3 | 0 | 10 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 3 | 3 | | | | | | | | | | | | | | |
| KIM6113 | Use of Protective Groups in Organic Chemistry | 3 | 0 | 10 | 5 | 4 | 5 | 5 | 4 | 3 | 5 | 3 | 4 | | | | | | | | | | | | | | |
| KIM6115 | Molecular Modeling in Organic Chemistry | 3 | 0 | 10 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | | | | | | | | | | | | | | |
| KIM6117 | Basic Group Elements Chemistry | 3 | 0 | 10 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6119 | Advanced Organometallic Chemistry-I | 3 | 0 | 10 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | | | | | | | | | | | | | | |
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| SPRING | | | | | Programme Outcomes | | | | | | | | | | | | | | | | | | | | | |
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| **Course Code** | **Course Name** | **T** | **P** | **ECTS** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | | | | | | | | | | | | | |
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| KIM5004 | Special Topics-II | 5 | 0 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5006 | Thesis Research | 0 | 1 | 20 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5008 | Seminar | 0 | 2 | 6 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | | | | | | | | | | | | | |
| KIM5102 | Coordination Polymers | 2 | 0 | 6 | 5 | 4 | 4 | 5 | 5 | 3 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5104 | Advanced Quantum Chemistry | 2 | 0 | 6 | 5 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | |
| KIM5106 | Living Polymerization | 2 | 0 | 6 | 5 | 5 | 4 | 5 | 5 | 3 | 5 | 5 | 4 | | | | | | | | | | | | | |
| KIM5108 | Advanced Coordination Chemistry | 2 | 0 | 6 | 5 | 4 | 5 | 5 | 4 | 3 | 4 | 5 | 5 | | | | | | | | | | | | | |
| KIM5110 | Chemistry of Natural Compounds | 2 | 0 | 6 | 5 | 5 | 5 | 3 | 5 | 4 | 5 | 4 | 4 | | | | | | | | | | | | | |
| KIM5112 | Synthetic Organic Chemistry-II | 2 | 0 | 6 | 5 | 4 | 5 | 5 | 3 | 4 | 5 | 3 | 4 | | | | | | | | | | | | | |
| KIM5114 | Alcoholoids | 2 | 0 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5116 | Polymer Chemistry-II | 3 | 0 | 8 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 3 | | | | | | | | | | | | | |
| KIM5118 | Liquid Chromatography | 3 | 0 | 8 | 4 | 5 | 3 | 4 | 5 | 4 | 3 | 4 | 5 | | | | | | | | | | | | | |
| KIM5120 | Corrosion Inhibitors | 3 | 0 | 8 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | | | | | | | | | | | | | |
| KIM5122 | Bonding Teories | 2 | 0 | 6 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | | | | | | | | | | | | | |
| KIM5124 | Structural Analysis of Coordination Compounds | 3 | 0 | 8 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | |
| KIM5126 | Retrosynhetic Analyzis of Organic Molecules | 3 | 0 | 8 | 5 | 4 | 5 | 5 | 3 | 4 | 5 | 3 | 4 | | | | | | | | | | | | | |
| KIM5128 | Plastic Additives-II | 3 | 0 | 8 | 5 | 4 | 5 | 3 | 5 | 5 | 5 | 4 | 5 | | | | | | | | | | | | | |
| KIM5130 | Surface Analysis Methods | 3 | 0 | 8 | 5 | 4 | 5 | 3 | 5 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | |
| KIM5132 | Macrocyclic Compounds | 3 | 0 | 8 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | | | | | | | | | | | | | |

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| KIM5134 | Named Organic Reactions | 3 | 0 | 8 | 5 | 4 | 5 | 5 | 4 | 3 | 5 | 2 | 4 | | | | | | | | | | | | | | |
| KIM5136 | Inorganic Electronic Spectroscopy | 3 | 0 | 8 | 5 | 4 | 5 | 4 | 5 | 4 | 3 | 4 | 3 | | | | | | | | | | | | | | |
| KIM5138 | Methods of Chemical Analysis of Water | 3 | 0 | 8 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 3 | 3 | | | | | | | | | | | | | | |
| KIM5140 | Coating Techniques | 3 | 0 | 8 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM5142 | Molecular Quantum Chemistry-II | 3 | 0 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| KIM5144 | Electrically Active Polymers | 3 | 0 | 8 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 3 | 3 | | | | | | | | | | | | | | |
| KIM5146 | Functional Group Interconversion | 3 | 0 | 8 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM5148 | Mass Spectroscopic Techniques | 2 | 0 | 6 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM5150 | Derivation Methods Sorpsion | 2 | 0 | 6 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | | | | | | | | | | | | | | |
| KIM5152 | Modern Chromatographic Techniques | 3 | 0 | 8 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | | | | | | | | | | | | | | |
| KIM5154 | Surfactants in Analytical Chemistry | 3 | 0 | 8 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 4 | | | | | | | | | | | | | | |
| KIM6002 | Seminar** | 0 | 2 | 6 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | | | | | | | | | | | | | | |
| KIM6004 | Specialized Field Course-II | 5 | 0 | 10 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6006 | Thesis Research | 0 | 1 | 20 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6008 | Doctoral Qualification | 0 | 0 | 30 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| KIM6102 | Advanced Polymer Chemistry-II | 3 | 0 | 10 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 3 | 3 | | | | | | | | | | | | | | |
| KIM6104 | Advanced Radicalic Reactions | 3 | 0 | 10 | 5 | 4 | 5 | 5 | 4 | 3 | 5 | 2 | 3 | | | | | | | | | | | | | | |
| KIM6106 | Advanced Organometallic Chemistry-II | 3 | 0 | 10 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | | | | | | | | | | | | | | |
| KIM6108 | Theoretical Foundations of Analytical Chemiatry-II | 3 | 0 | 10 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 3 | 3 | | | | | | | | | | | | | | |
| KIM6110 | Inorganic Reaction Mechanisms-II | 3 | 0 | 10 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | | | | | | | | | | | | | | |
| KIM6112 | Application of Frontier Orbitals | 3 | 0 | 10 | | | | | | | | | | | | | | | | | | | | | | | |
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