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| **Course Plan for Industrial Design (Bachelor Program) No.: ()** |
| **Approved by Deans Council by decision ( ) dated ()** |
| **132 Credit Hours** | **Study system / hybrid program** |
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| **Teaching style** | **Percentage of study plan hours / number** | **Model used (synchronous: asynchronous)** |
| **Complete e-learning courses** | 20% / number( 27 ) C h  | 1:1 (For SUN-THER) |
| **Traditional Learning**  | 40% / number(54 ) C h  | 1:1 (For SUN. TUE.) or 1:1 (for MON. WED.) |
| **Blended learning**  | 40% / number (51 ) C h  | 1:1 (For SUN. TUE) or 1:1 (for MON. WED.) |

Important note: (The teaching patterns of the subjects are distributed at all academic levels in the program)

Program vision Building specialized competencies in the field of industrial design equipped with the knowledge, skills and leadership, creative and pioneering competencies necessary to compete in the global labor market, by focusing on innovation, creativity, quality, research and strategic partnership mixed with values and commitment to society by adopting a comprehensive approach to promote sustainable development in industrial design

Program mission and objectives:

1. Achieving the conformity of the learning outcomes in all areas of specialization with the seventh level descriptors (knowledge, skills and competencies) in the National Qualifications Framework.

2. Integrating modern information technology and employing it creatively in the teaching and learning processes in order to achieve more effective learning and take into account the needs of the learner.

 3. Promote the principle of self-sustainable, lifelong learning, and highlight the creativity of the learner in light of global changes through the application of various teaching and learning strategies

4- To nurture industry-ready designers through holistic training in the field of industrial design

5- To innovate newer methods of problem solving in the field of design using state-of-the-art research facilities.

6- To produce confident & skilled professionals, and leaders’ in the field of industrial design

Program learning outcomes (*(MK= Main Knowledge, MS= Main Skills, MC= Main Competences)*

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| **Main knowledge** |
| MK1 | Apply knowledge of science and engineering in products design  |
| MK2 | Understand the concepts of the manufacturing process and interacting methods with products |
| MK3 | Design a component or a product applying realistic constraints of public health, safety, culture, society and environment. |
| MK4 | Design and conduct experiments, as well as to analyse and interpret data. |
| MK5 | Using modern technologies and information technology to design various products |
| **Basic skills** |  |
| MS1 | Having the ability to solve problems through various design methods |
| MS2 | Understanding of professional and ethical responsibility |
| MS3 | Having the skills of designing various industrial products and understanding the ways to interact with them |
| MS4 | Having critical thinking and innovative skills in design and the ability to adapt to various industrial environments |
| MS5 |  Having the skill of managing and financing industrial projects |
| MS6 | Understanding the properties of raw materials and the various methods of their manufacture |
| **General competencies** |  |
| MC1 | The ability to select and use appropriate materials to build products |
| MC2 | The ability to take responsibility for decision-making, identify problems, solutions and challenges in the form and design , and imagine creative ways to get the desired goal. |
| MC3 | Recognize the societal, ethical and economic implications of using designed products. |
| MC4 | The ability to design and implement multi- products that keep with state-of-the-art developments from a local, regional and global perspective. |
| MC5 | Conduct research and development of new products for improving human life. |

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| Teaching style | Course No. | Course name | Credit hour | Theory Hours | Practical Hours | PrerequisiteCo-requisite | Indicative |
| Fully electronic learning | Blended learning | Traditional learning | Semester | year |
| 1. **Requirements (27) Credit Hours**
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| * 1. **Mandatory requirement (21 credit hour)**
 |
| • |  |  | 0420101 | Military Sciences  | 3 | 3 | 0 |  | 1 | 1 |
| • |  |  | 0420151 | National Education  | 3 | 3 | 0 |  | 2 | 1 |
| • |  |  | 0420271 | Life skills | 3 | 3 | 0 |  | 1 | 2 |
| • |  |  | 0420115 | Communication skills in Arabic language  | 3 | 3 | 0 | Remedial Arabic Language | 1 | 1 |
| • |  |  | 0420122 | Communication skills in English language | 3 | 3 | 0 | Remedial English Language | 2 | 1 |
| • |  |  | 0420261 | Entrepreneurship and innovation | 3 | 3 | 0 |  | 2 | 2 |
| • |  |  | 0420241 | Leadership and social responsibility | 3 | 3 | 0 |  | 1 | 2 |
|  **1.2 University elective requirements(06 credit hour)** |
| • |  |  | 0420142 | Human Civilization  | 3 | 3 | 0 |  | 1 | 1 |
| • |  |  | 0420253 | Development and environment | 3 | 3 | 0 |  | 1 | 2 |
| • |  |  | 0420172 | Digital skills | 3 | 3 | 0 | Remedial computer skills | 2 | 1 |
| • |  |  | 0420201 | first aid | 3 | 3 | 0 |  | 2 | 2 |
| • |  |  | 0420134 | Sports and health | 3 | 3 | 0 |  | 1 | 1 |
| • |  |  | 0420212 | Islamic culture | 3 | 3 | 0 |  | 1 | 2 |
| • |  |  | 0420341 | Principals of German Language | 3 | 3 | 0 |  | 2 | 3 |

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| Teaching style | Course No. | Course name | Credit hour | Theory Hours | Practical Hours | PrerequisiteCo-requisite | Indicative |
| Fully electronic learning | Blended learning | Traditional learning | Semester | year |
| 1. **Faculty Requirements (21 ) Credit Hours**
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|  | • |  | 1001173 | principles of design |  |  |  |  | **1** | **1** |
|  |  | • | 1004151 | Free hand sketching |  |  |  |  | **1** | **1** |
|  | • |  | 1002122 | visual communication theories |  |  |  |  | **2** | **1** |
|  |  | • | 1002130 | Software of design  |  |  |  |  | **2** | **1** |
|  |  | • | 1003127 | Photography and digital processing |  |  |  |  | **1** | **2** |
|  | • |  | 1003213 | Technical writing and research skills  |  |  |  |  | **1** | **2** |
|  | • |  | 1004213 | History of art  |  |  |  |  | **1** | **3** |

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| Teaching style | Course No. | Course name | Credit hour | Theory Hours | Practical Hours | PrerequisiteCo-requisite | Indicative |
| Fully electronic learning | Blended learning | Traditional learning | Semester | year |
| 1. **Requirements for a major family ( 84 ) Credit Hours**
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| Teaching style | Course No. | Course name | Credit hour | Theory Hours | Practical Hours | PrerequisiteCo-requisite | Indicative |
| Fully electronic learning | Blended learning | Traditional learning | Semester | year |
| 1. **Major requirements (84 ) Credit Hours**

**4.1 Mandatory requirements (75 ) credit hours** |
|  |  • |  | 1005111 | Introduction to industrial design | 3 | 3 | 0 | N/A | 1 | 1 |
|  |  | • | 1005112 | 2D drawing  | 3 | 0 | 6 | N/A | 1 | 1 |
|  |  | • | 1005113 | Model making 3D | 3 | 0 | 6 | 2D drawing | 2 | 1 |
|  | • |  | 1005121 | Human Computer Interaction | 3 | 3 | 0 | Introduction to industrial design | 2 | 1 |
|  | • |  | 1005116 | Form and Space design  | 3 | 2 | 1 | 2D drawing | 2 | 1 |
|  |  | • | 1005214 | Prototype design  | 3 | 1 | 4 | 2D drawing | 1 | 2 |
|  |  | • | 1005223 | Industrial applications | 3 | 0 | 6 | 2D drawing &Model making 3D | 1 | 2 |
|  | • |  | 1005222 | User Experience and Control Panels design  | 3 | 1 | 4 | Prototype design  | 2 | 2 |
|  |  | • | 1005235 | Packing  | 3 | 1 | 4 | Industrial applications | 2 | 2 |
|  | • |  | 1005224 | Ergonomics  | 3 | 2 | 2 | Human Computer Interaction | 1 | 2 |
|  | • |  | 1005215 | Interior Design | 3 | 3 | 0 | Form and Space | 2 | 2 |
|  |  | • | 1005226 | Carpentry lab  | 1 | 0 | 2 | Prototype design  | 1 | 2 |
|  |  | • | 1005227 | Blacksmithing lab | 1 | 0 | 2 | Prototype design  | 2 | 2 |
|  |  | • | 1005317 | Material and production methods | 3 | 2 | 2 | Packing  | 1 | 3 |
|  | • |  | 1005337 | Project management | 3 | 2 | 2 | Prototype design | 1 | 3 |
|  |  | • | 1005318 | Material science  | 3 | 3 | 0 | Ergonomics  | 1 | 3 |
|  |  | • | 1005328 | Sculpting lab  | 1 | 0 | 2 | Model making 3D | 2 | 3 |
|  |  | • | 1005336 | Toy design  | 3 | 2 | 2 | & Material and production methods Material Science | 2 | 3 |
|  |  | • | 1005434 | Medical products design | 3 | 2 | 2 | Material and production methods& Material science | 2 | 3 |
|  |  | • | 1005425 |  Virtual Reality Technologies in industrial design  | 3 | 1 | 4 | Model Making 3D | 1 | 4 |
|  |  | • | 1005422 | Industrial design project- environment design  | 3 | 0 | 6 | Material and production methods | 1 | 4 |
|  |  | • | 1005431 | Industrial design project- furniture design | 3 | 0 | 6 | Industrial applications-Interior Design | 1 | 4 |
|  | • |  | 1005419 | Textile science and Fabrics  | 3 | 0 | 6 | Material science | 2 | 4 |
|  | • |  | 1005433 | Industrial design project- present and future products design  | 3 | 0 | 6 | Industrial applications | 2 | 4 |
|  |  | • | 1005446 | Practical Training (1) | 3 | 0 | 6 | Department approval | 1 | 4 |
|  |  | • | 1005447 | Practical Training (2) | 3 | 0 | 6 | Department approval  | 2 | 4 |
|  | • |  | 1005448 | Graduation Project | 3 | 0 | 6 | Department approval | 2 | 4 |
| 4.2 electives requirements ( 06 ) credit hours |
|  | • |  | 1005241 | Industrial Products Marketing | 3 | 3 | 0 | Packing | 2 | 3 |
|  | • |  | 1005338 | Industrial design project- Advanced furniture | 3 | 1 | 4 | Industrial design project- furniture | 2 | 4 |
|  | • |  | 1005239 | Selected topics in industrial design  | 3 | 2 | 2 | Industrial applications | 1 | 2 |
|  | • |  | 1005342 | Sustainable product design  | 3 | 1 | 4 | Material science | 1 | 3 |
|  | • |  | 1005343 | Smart products design  | 3 | 1 | 4 | Material science | 2 | 3 |
|  | • |  | 1005329 | Product planning and strategy  | 3 | 3 | 0 | Project management | 2 | 4 |
|  | • |  | 1005444 | Design in Arab context  | 3 | 3 | 0 | Interior Design | 2 | 2 |
|  | • |  | 1005445 | 3D Printing  | 3 | 1 | 4 | Model making 3D | 2 | 3 |
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|  | • |  | 1002445 | Aesthetics | 3 | 3 | 0 |  | 2 | 2 |

The end of the study plan for the major students

Subjects taught in the major for students of other majors (university requirements, college requirements, major family requirements, support requirements)

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| Teaching style | Course No. | Course name | Credit hour | Theory Hours | Practical Hours | The type of requirement and the recipient |
| Fully electronic learning | Blended learning | Traditional learning |
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