

## The University of Jordan School of Engineering Industrial Engineering Department Fall 2020/2021

| Course name:                                 |                | Graduation Project  |                                |                               |                    |  |  |  |
|--|----------------|---|--------------------------------|-------------------------------|--------------------|--|--|--|
| Course code:                                 |                | IE 0976598 IE0976598  |                                |                               |                    |  |  |  |
| Credits hours                                |                | 3   |                                |                               |                    |  |  |  |
| Contact hours& room                          | n\office hours | One hour per week to be set with the instructor                                       |                                |                               |                    |  |  |  |
|  | Б 1            | I.E Faculty members   |                                |                               |                    |  |  |  |
| Course instructor's name, E-mail, and phone: |                | w.khraisat@ju.edu.jo  |                                |                               |                    |  |  |  |
|  |                | 5355000   |                                |                               |                    |  |  |  |
| Course Coordinator:                          |                | Dr. Walid khraisat  |                                |                               |                    |  |  |  |
| Text book:                                   |                | NA  |                                |                               |                    |  |  |  |
| Other reference(s):                          |                | Available resources form books and scientific journals                                |                                |                               |                    |  |  |  |
| Course Description:                          |                | Preparatory studies of the literature and data collection for the graduation project  |                                |                               |                    |  |  |  |
|  |                | in a particular area of concentration and under the supervision of one of the faculty |                                |                               |                    |  |  |  |
|  |                | members. The course covers directed readings in the literature of industrial          |                                |                               |                    |  |  |  |
|  |                | engineering, introduction to research methods, meeting discussions dealing with       |                                |                               |                    |  |  |  |
|  |                | special engineering topics of current interest. Planning, design, manufacturing,      |                                |                               |                    |  |  |  |
|  |                | quality control, simulation, construction and management of an industrial             |                                |                               |                    |  |  |  |
|  |                | engineering application or project. Writing a technical report.                       |                                |                               |                    |  |  |  |
| Providing Department:                        |                | Industrial Engineering  |                                |                               |                    |  |  |  |
| Prerequisite Course:                         |                | Pass 124 credit hours (IE 0936311)  |                                |                               |                    |  |  |  |
| Course type                                  |                | Mandatory   |                                |                               |                    |  |  |  |
| <u>,</u>                                     |                | Method  |                                | Weight %                      | Date               |  |  |  |
|  |                |   |                                |                               |                    |  |  |  |
|  |                |   |                                | At the end of semester of     |                    |  |  |  |
|  |                | Graduation project I  |                                | Pass or Fail                  | registration       |  |  |  |
| Assessment Methods:                          |                | Graduation project II   |                                | 50                            | 0                  |  |  |  |
|  |                |   |                                |                               |                    |  |  |  |
|  |                | Oral Presentation   |                                | 50                            | At the end of the  |  |  |  |
|  |                |   |                                |                               | following semester |  |  |  |
|  |                |   |                                |                               |                    |  |  |  |
|  |                | #   | After successful               | completion of this course, th | SO                 |  |  |  |
|  |                |   | student will be able to        |                               | ~ ~                |  |  |  |
|  |                | CL 01   | Work affectively within a team |                               | 5                  |  |  |  |
|  |                | CLO1  | Structure a work               | 1                             |                    |  |  |  |
| Course Learning                              | Outcomes:      |   | Carry out Engine               | 2                             |                    |  |  |  |
|  |                | CLOS  | Write a technica               | 3                             |                    |  |  |  |
|  |                | CLO5  | Defend the tec                 | 3 3                           |                    |  |  |  |
|  |                | CLOU  | committee and                  | a J                           |                    |  |  |  |
|  |                |   | asked by the committee members |                               |                    |  |  |  |
|  |                | asked by the committee memoers.   |                                |                               |                    |  |  |  |
| Week #                                       |                | Topic   |                                |                               |                    |  |  |  |
| Brief list of topics                         | 1-3            | Define tonic  |                                |                               |                    |  |  |  |
|  | 1-12           | Literature review   |                                |                               |                    |  |  |  |
|  | 13_1/          | Define objectives and write proposal  |                                |                               |                    |  |  |  |
|  | 15 17          | Design the approach   |                                |                               |                    |  |  |  |
|  | 13-17          | Design the approach   |                                |                               |                    |  |  |  |
|  | 18-20          | Data collection, experimentations, and theoretical study                              |                                |                               |                    |  |  |  |

|  |  | 27-29  | Analyze data and draw results and conclusions                   |   |  |  |  |  |  |
|--|--|--|---|---|--|--|--|--|--|
|  |  | 30-31  | Writing final GP document and preparation for oral presentation |   |  |  |  |  |  |
|  |  | Do not hesitate to ask questions   |   |   |  |  |  |  |  |
|  |  | • You are required to bring a notebook and take notes in classes.                                |   |   |  |  |  |  |  |
|  |  | • Students are expected to attend every class session and they are responsible for all material, |   |   |  |  |  |  |  |
|  |  | announcements, schedule changes, etc., discussed in class.                                       |   |   |  |  |  |  |  |
|  |  | • Discuss the assignments among yourselves   |   |   |  |  |  |  |  |
| Important Notes:   | • Don't Cheat; direct copying of others work will NOT be allowed or tolerated and will result in                       |  |   |   |  |  |  |  |  |
|  | a reduction of grade. If you are found to be cheating in any way, on an exam or assignment,                            |  |   |   |  |  |  |  |  |
|  | even signing the roll sheet for another student, you will be given an "F" for the course. There will be no exceptions. |  |   |   |  |  |  |  |  |
|  | • All cases of academic dishonesty will be handled in accordance with university policies and                          |  |   |   |  |  |  |  |  |
|  |  | regulations. JU policy requires the faculty member to assign ZERO grade (F) if a student         |   |   |  |  |  |  |  |
|  | misses 15% of the classes that are not excused, and 20% of the classes that are excused                                |  |   |   |  |  |  |  |  |
|  |  | • Students are expected to be ready to take a quiz any time they have a class. There will be no  |   |   |  |  |  |  |  |
|  |  | make-up quizzes or home works.   |   |   |  |  |  |  |  |
|  |  | • Any students with disabilities who need accommodations in this course are encouraged to        |   |   |  |  |  |  |  |
|  |  | speak with the instructor as soon as possible to make appropriate arrangements for these         |   |   |  |  |  |  |  |
| T  | accommodations.  |  |   |   |  |  |  |  |  |
| The B.Sc. in industrial Engineering program enables students to achieve, by the time of graduation the following |  |  |   |   |  |  |  |  |  |
|  | program ied  | irning ouicome   | (50s)   |   |  |  |  |  |  |
| 1  | 1.1.   | lentify, formulate, and solve complex  |   | 5 | an ability to function effectively on a team whose   |  |  |  |  |
| 1  | an ability to it   |  |   |   | members together provide leadership, create a        |  |  |  |  |
| engineering pi<br>engineering, sci   |  | ience, and mathematics   |   |   | collaborative and inclusive environment, establish   |  |  |  |  |
|  |  |  |   |   | goals, plan tasks, and meet objectives               |  |  |  |  |
| $\frac{2}{2}$ an ability to a  |  | apply engineeri  | nnly anginagring design to produce                              |   | an ability to develop and conduct appropriate        |  |  |  |  |
|  |  | apply engineering design to produce  |   | 6 |  |  |  |  |  |
|  | of public health   | sofoty and we  | lfora as well as global   |   | experimentation, analyze and interpret data, and use |  |  |  |  |
|  | or public health, safety, and wentare, as well as global,  |  |   |   | engineering judgment to draw conclusions             |  |  |  |  |
|  | cultural, social,  | environnental,   |   | 7 | an ability to acquire and apply new knowledge as     |  |  |  |  |
| <i>3</i> an ability to co audiences  |  | ommunicate effectively with a range of   |   | / | needed using appropriate learning                    |  |  |  |  |
|  |  |  |   |   | strategies.  |  |  |  |  |
|  | an ability to rec  | cognize ethical and professional responsibilities in engineering situations and make informed    |   |   |  |  |  |  |  |
| 4  | eering solutions in global, economic, environmental,   |  |   |   |  |  |  |  |  |
|  | and societal contexts  |  |   |   |  |  |  |  |  |