

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

| Module Information                 |                                      |                              |                                                                                                                                                                                                                                          |
|------------------------------------|--------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| معلومات المادة الدراسية            |                                      |                              |                                                                                                                                                                                                                                          |
| Module Title                       | <b>Engineering Drawing</b>           |                              | Module Delivery                                                                                                                                                                                                                          |
| Module Type                        | Support or related learning activity |                              | <input checked="" type="checkbox"/> Theory<br><input type="checkbox"/> Lecture<br><input checked="" type="checkbox"/> Lab<br><input type="checkbox"/> Tutorial<br><input type="checkbox"/> Practical<br><input type="checkbox"/> Seminar |
| Module Code                        | <b>CE110</b>                         |                              |                                                                                                                                                                                                                                          |
| ECTS Credits                       | 7                                    |                              |                                                                                                                                                                                                                                          |
| SSWL (hr/sem)                      | <b>108</b>                           |                              |                                                                                                                                                                                                                                          |
| USSWL (hr/sem)                     | <b>67</b>                            |                              |                                                                                                                                                                                                                                          |
| SWL (hr/sem)                       | <b>175</b>                           |                              |                                                                                                                                                                                                                                          |
| Module Level                       | 1                                    | Semester of Delivery         |                                                                                                                                                                                                                                          |
| Administering Department           | CE                                   | College                      | Type College Code                                                                                                                                                                                                                        |
| Module Leader                      | Huda.saaduldeen.<br>Jihad Kais Fahil |                              | e-mail<br><a href="mailto:huda.saaduldeen@alnaji-uni.edu.iq">huda.saaduldeen@alnaji-uni.edu.iq</a><br><a href="mailto:Jihad.qais@alnaji-uni.edu.iq">Jihad.qais@alnaji-uni.edu.iq</a>                                                     |
| Module Leader's Acad. Title        |                                      | Ass.Lecturer<br>Ass.Lecturer | Module Leader's Qualification<br>Ms.c<br>Ms.c                                                                                                                                                                                            |
| Module Tutor                       | Name (if available)                  | e-mail                       | E-mail                                                                                                                                                                                                                                   |
| Peer Reviewer Name                 |                                      | e-mail                       | <a href="mailto:Aliaa.faleh@coeng.uobaghdad.edu.iq">Aliaa.faleh@coeng.uobaghdad.edu.iq</a>                                                                                                                                               |
| Scientific Committee Approval Date |                                      | Version Number               | 1.0                                                                                                                                                                                                                                      |

### Relation with other Modules

| العلاقة مع المواد الدراسية الأخرى |      |          |  |
|-----------------------------------|------|----------|--|
| Prerequisite module               |      | Semester |  |
| Co-requisites module              | None | Semester |  |

| Module Aims, Learning Outcomes and Indicative Contents           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Module Objectives</b><br>أهداف المادة الدراسية                | This unit will enable learners to produce engineering drawings of different components, assemblies and circuits using a variety of sketching, drawing and computer-aided drafting techniques.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Module Learning Outcomes</b><br>مخرجات التعلم للمادة الدراسية | The fulfillment of the requirements of this course will enable the student to be able to perform the following <ol style="list-style-type: none"> <li>1- Basic principles of engineering drawing</li> <li>2- Types of drawing lines</li> <li>3- Drawing various curves and knowledge of Geometry processes</li> <li>4-Projection drawing</li> <li>5- Drawing sections and how to put dimensions on the drawing</li> <li>6- Learning to draw the three-dimensional shape by giving the projections of the body</li> </ol>                                                                                                |
| <b>Indicative Contents</b><br>المحتويات الإرشادية                | Indicative content includes the following.<br><u>Part A</u><br>Introduction (Defining the principle of engineering drawing and identifying the types and sizes of pens and sheets Used in drawing as well as the tools used in drawing). [3 hrs]<br><u>Part B</u><br>Basic principles of engineering drawing Writing letters and numbers [3 hrs]<br><u>Part C</u><br>Types of drawing lines [6 hrs]<br><u>Part D</u><br>Geometry processes [6 hrs]<br><u>Part E</u><br>Projections [9 hrs]<br><u>Part F</u><br>Sectional view [6 hrs]<br><u>Part G</u><br>Dimensions 3 hrs]<br><u>Part H</u><br>Isometric shape [9 hrs] |

## Learning and Teaching Strategies

### استراتيجيات التعلم والتعليم

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Strategies</b> | <p>The main adopted strategy in delivering this module, encourage students' participation in the exercises, refining and expanding their critical thinking skills comprised:</p> <ol style="list-style-type: none"> <li>1) Lectures.</li> <li>2) Tutorials.</li> <li>3) Homework and Assignments.</li> <li>4) Lab. Experiments.</li> <li>5) Tests and Exams.</li> <li>6) In-Class Questions and Discussions.</li> <li>7) Connection between Theory and Application.</li> <li>8) Field Trips.</li> <li>9) Extracurricular Activities.</li> <li>10) Seminars.</li> <li>11) In- and Out-Class oral conservations.</li> <li>12) Reports, Presentations, and Posters.</li> </ol> |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Student Workload (SWL)

### الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

|                                                                                |     |                                                                           |   |
|--------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------|---|
| <b>Structured SWL (h/sem)</b><br>الحمل الدراسي المنتظم للطالب خلال الفصل       | 108 | <b>Structured SWL (h/w)</b><br>الحمل الدراسي المنتظم للطالب أسبوعيا       | 7 |
| <b>Unstructured SWL (h/sem)</b><br>الحمل الدراسي غير المنتظم للطالب خلال الفصل | 67  | <b>Unstructured SWL (h/w)</b><br>الحمل الدراسي غير المنتظم للطالب أسبوعيا | 4 |
| <b>Total SWL (h/sem)</b><br>الحمل الدراسي الكلي للطالب خلال الفصل              | 175 |                                                                           |   |

## Module Evaluation

| تقييم المادة الدراسية                            |                        | Time/Number | Weight (Marks)   | Week Due     | Relevant Learning Outcome |
|--------------------------------------------------|------------------------|-------------|------------------|--------------|---------------------------|
| <b>010</b><br>Outcome<br>Formative<br>assessment | <b>Quizzes</b>         | 1           | 10% (10)         | 5,9,11,14    | Lo#2,#3,#4,#5,#6          |
|                                                  | <b>Assignments(CW)</b> | 1           | 10% (10)         | From 3 to 15 | All                       |
|                                                  | <b>Assignments(HW)</b> | 1           | 10% (10)         | From 3 to 15 | All                       |
|                                                  | <b>Lab.(Auto CAD)</b>  | 1           | 10% (10)         | 4,14,15      | All                       |
|                                                  | <b>Midterm Exam</b>    | 2hr         | 10% (10)         | 8            | All                       |
|                                                  | <b>Final Exam</b>      | 3hr         | 10% (50)         | 16           | All                       |
| <b>Total assessment</b>                          |                        |             | 100% (100 Marks) |              |                           |

| <b>Delivery Plan (Weekly Syllabus)</b><br>المنهاج الاسبوعي النظري |                                               |
|-------------------------------------------------------------------|-----------------------------------------------|
|                                                                   | Material Covered                              |
| Week 1                                                            | Introduction                                  |
| Week 2                                                            | Basic principles of engineering drawing       |
| Week 3                                                            | Types of drawing lines                        |
| Week 4                                                            | Types of drawing lines                        |
| Week 5                                                            | Geometry processes                            |
| Week 6                                                            | Geometry processes                            |
| Week 7                                                            | Projections                                   |
| Week 8                                                            | Projections                                   |
| Week 9                                                            | Projections                                   |
| Week 10                                                           | Sectional view                                |
| Week 11                                                           | Sectional view                                |
| Week 12                                                           | Dimensions                                    |
| Week 13                                                           | Isometric shape                               |
| Week 14                                                           | Isometric shape                               |
| Week 15                                                           | Isometric shape                               |
| Week 16                                                           | <b>Preparatory week before the final Exam</b> |

| <b>Delivery Plan (Weekly Lab. Syllabus)</b><br>المنهاج الاسبوعي للمختبر |                                                                                          |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                                                                         | Material Covered                                                                         |
| Week 1                                                                  | Introduction to Auto CAD software.                                                       |
| Week 2                                                                  | Control page in Auto CAD software.                                                       |
| Week 3                                                                  | Type of coordinate.                                                                      |
| Week 4                                                                  | The command line and applications.                                                       |
| Week 5                                                                  | the modified command (copy, move) with examples                                          |
| Week 6                                                                  | The help order in drawing (Grid, Snap, Polar, Object Tracking).                          |
| Week 7                                                                  | The command circle ,rectangle, offset with solving examples.                             |
| Week 8                                                                  | solving examples by using polar and nature coordinates options.                          |
| Week 9                                                                  | The command array with types and ellipase with solving examples using auto cad software. |

|                |                                                                        |
|----------------|------------------------------------------------------------------------|
| <b>Week 10</b> | The command scale and aligned with slaving example for house building. |
| <b>Week 11</b> | The command arc with all options.                                      |
| <b>Week 12</b> | The command layers with solving examples.                              |
| <b>Week 13</b> | The command polyline with options.                                     |
| <b>Week 14</b> | Types of dimensions with application examples                          |
| <b>Week 15</b> | the command text and types                                             |
| <b>Week 16</b> | Preparing and printing options with examples                           |

### Learning and Teaching Resources

#### مصادر التعلم والتدريس

|                          | Text                                                                                                                                                                                                                                                             | Available in the Library? |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>Required Texts</b>    | <ul style="list-style-type: none"> <li>- "Principle of technical drawing" by Frederick E. Giesecke, Alva Mitchell, Henry Cecil Spencer, Ivan Hill, John Thomas, James E. Novak, 1992.</li> <li>"Graphics Drawing workbook" by Gray R. Bertoline, 2000</li> </ul> | Yes                       |
| <b>Recommended Texts</b> | <ul style="list-style-type: none"> <li>- Engineering drawing by Abed Alrasul Al Khafaf, 1986.</li> </ul>                                                                                                                                                         | Yes                       |
| <b>Websites</b>          | Electronic references, Internet sites...                                                                                                                                                                                                                         |                           |

### Grading Scheme

#### مخطط الدرجات

| Group                               | Grade                   | التقدير             | Marks %  | Definition                            |
|-------------------------------------|-------------------------|---------------------|----------|---------------------------------------|
| <b>Success Group<br/>(50 - 100)</b> | <b>A - Excellent</b>    | امتياز              | 90 - 100 | Outstanding Performance               |
|                                     | <b>B - Very Good</b>    | جيد جدا             | 80 - 89  | Above average with some errors        |
|                                     | <b>C - Good</b>         | جيد                 | 70 - 79  | Sound work with notable errors        |
|                                     | <b>D - Satisfactory</b> | متوسط               | 60 - 69  | Fair but with major shortcomings      |
|                                     | <b>E - Sufficient</b>   | مقبول               | 50 - 59  | Work meets minimum criteria           |
| <b>Fail Group<br/>(0 – 49)</b>      | <b>FX – Fail</b>        | راسب (قيد المعالجة) | (45-49)  | More work required but credit awarded |
|                                     | <b>F – Fail</b>         | راسب                | (0-44)   | Considerable amount of work required  |
|                                     |                         |                     |          |                                       |

**Note:** Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.