

## Department of Water Resources Management Engineering

المقررات والوحدات الدراسية

| First Year |                                   |                         |       |
|------------|-----------------------------------|-------------------------|-------|
| code       | Subject                           | الموضوع                 | units |
| SME101     | Engineering Mechanics             | ميكانيك هندسي           | 6     |
| SME102     | Mathematics I                     | رياضيات I               | 6     |
| SME103     | Engineering Drawing               | الرسم الهندسي           | 4     |
| SME104     | Engineering Statistics            | الاحصاء الهندسي         | 4     |
| SME105     | Principle of Computer Programming | مبادئ الحاسبات والبرمجة | 6     |
| SME106     | Water Engineering                 | هندسة مياه              | 4     |
| SME107     | Engineering Geology               | جيولوجيا هندسية         | 4     |
| SME108     | Soil physics and land reclamation | فيزياء تربة             | 5     |
| SME109     | Workshops                         | ورش هندسية              | 2     |
| SME110     | Arabic Language                   | اللغة العربية           | ---   |
| Total      |                                   |                         | 41    |

| Second Year |   |                       |       |
|-------------|---|-----------------------|-------|
| code        | Subject                                   | الموضوع               | units |
| SME201      | Mathematics II                            | الرياضيات II          | 6     |
| SME202      | Computer Programming                      | برمجة                 | 3     |
| SME203      | Construction and Building Materials       | مواد بناء             | 4     |
| SME204      | Fluid Mechanics                           | ميكانيك موائع         | 6     |
| SME205      | Strength of Materials                     | مقاومة مواد           | 4     |
| SME206      | Concrete Technology                       | تكنولوجيا الخرسانة    | 6     |
| SME207      | Surveying                                 | المساحة               | 7     |
| SME208      | Principle Irrigation and drainage systems | مبادئ ري ويزل         | 4     |
| SME209      | Human Rights and Democracy                | ديمقراطية وحقوق انسان | 2     |
| Total       |   |                       | 42    |

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| Third Year |   |                             |       |
|------------|---|-----------------------------|-------|
| code       | Subject                                     | الموضوع                     | units |
| SME301     | Water quality control                       | نوعية مياه                  | 6     |
| SME302     | Engineering Hydrology                       | هيدرولوجي                   | 4     |
| SME303     | Optimization in water resources projects    | اقتصاديات                   | 4     |
| SME304     | Geographic information system               | نظام معلومات جغرافية        | 5     |
| SME305     | Theory of Structures                        | نظرية انشاءات               | 4     |
| SME306     | Irrigation and drainage networks            | شبكات ري وبزل               | 4     |
| SME307     | Sustainable management of water resources I | الإدارة المستدامة للموارد I | 4     |
| SME308     | Soil Mechanics                              | ميكانيك تربة                | 6     |
| SME309     | Engineering Analysis and Numerical Methods  | هندسية تحليلات              | 4     |
| Total      |   |                             | 41    |

| Forth Year |  |                               |       |
|------------|--|-------------------------------|-------|
| code       | Subject  | الموضوع                       | units |
| SME401     | Design of Hydraulic structures                 | تصميم منشآت هيدروليكية        | 6     |
| SME402     | Design of pipeline system and pumping stations | تصميم انابيب ومحطات ضخ        | 4     |
| SME403     | Design of Concrete structures                  | تصميم هياكل كونكريتية         | 4     |
| SME404     | Ground Water Hydraulics                        | المياه الجوفية الهيدروليكية   | 4     |
| SME405     | Design of Irrigation and drainage systems      | تصميم منظومات الري والبزل     | 4     |
| SME406     | Engineering Project                            | بحث هندسي                     | 4     |
| SME407     | Estimation and Specifications                  | تخمين ومواصفات                | 4     |
| SME408     | Computer applications in water works           | تطبيقات حاسوب في اعمال المياه | 2     |
| SME409     | Engineering Foundation                         | اسس                           | 4     |
| SME410     | Sustainable management of water resources II   | الإدارة المستدامة للموارد II  | 4     |
| Total      |  |                               | 40    |