



AL IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY
COLLEGE OF ENGINEERING
Department of Mechanical Engineering

| Course Information | |
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| Course Code and Name: | ME413 Corrosion Engineering |
| Credit Hours: | 3 (3 Lecture + 1 Tutorial) |
| Prerequisites: | ME211 Materials Science and Engineering |

| Course Description |
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| This course is designed to introduce basic and modern concepts of corrosion engineering, including mixed potential theory, types of corrosion, cell potentials, factors influencing the corrosion rate of metals, and prevention techniques. The corrosion properties of materials and their applications are also discussed. |

| Textbook | | | |
|-----------|-----------------------|------------------|-------------------------------|
| Title | Corrosion Engineering | | |
| Authors | Mars G. Fontana | | |
| Publisher | McGraw-Hill, New York | Year and Edition | 1986, 3 rd Edition |

| Course Contents |
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| Introduction to Corrosion Engineering |
| Corrosion Principles |
| Eight Forms of Corrosion |
| Materials |
| Corrosion Prevention |
| Modern Theory - Principles |
| Modern Theory - Applications |

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| Academic Coordinator | Signature |
| Prof. Dr. Sabbah Ataya | <i>S. Ataya</i> |

Official Stamp

