Republic of Iraq

Ministry of Higher Education & Scientific Research

Supervision and Scientific Evaluation Directorate

Quality Assurance and Academic Accreditation

InternationalAccreditation Dept.

Academic Program Specification FormFor The Academic Year 2017-2018

Universitiy: Baghdad

College : Engineering

Number Of Departments In The College : 12 Twelve

Date Of Form Completion : 1/9/2017

Dean ’s Name

Date : 1 / 9 / 2017

Signature

Dean ’s Assistant For Scientific Affairs

Date : 1 / 9 / 2017

Signature

The College Quality Assurance And University Performance Manager

Date : 1 / 9 / 2017

Signature

Quality Assurance And University Performance Manager

Date : 1 / 9 / 2017

Signature

**TEMPLATE FOR COURSE SPECIFICATION**

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| HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW |

**COURSE SPECIFICATION**

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| This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve anddemonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification. |

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| College of Engineering | ***1. Teaching Institution*** |
| University of Baghdad / Department of Surveying | ***2. University Department/Centre*** |
| Remote Sensing | ***3. Course title/code& Description*** |
| BSc in Surveying Engineering (stage 3) | ***4. Programme(s) to which itContributes*** |
| Semester | ***5. Modes of Attendance offered*** |
| 2017-2018 | ***6. Semester/Year*** |
| 30 | ***7. Number of hours tuition (total)*** |
|  | ***8. Date of production/revision of this specification*** |
| ***9. Aims of the Course*** | |
| This course aims to introduce the fundamental concepts of remote sensing in addition to the fundamentals of image processing. | |

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| ***10·Learning Outcomes*** |
| At the end of the course, students should have a complete knowledge about the different types of remote sensing approaches. |
| ***11.Teaching and Learning Methods*** |
| Lectures |
| ***12. Assessment Methods***  Exams |
| ***13. Grading Policy***  Grades from monthly exams+ grade from final exam. |

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| ***14. Course Structure*** | | | | | |
|  |  |  |  |  | Week |
|  |  | Definition of remote sensing, Electromagnetic radiation  Electromagnetic spectrum |  |  | 1 |
|  |  | Interaction with the auto sphere, Interaction with the target  Remote sensing system, Active sensing system |  |  | 2 |
|  |  | Sensors plate forms,(Ground, Air, Space)  Satellite characteristics |  |  | 3 |
|  |  | Spectral resolution  Radiometric resolution, Temporal resolution |  |  | 4 |
|  |  | Multispectral scanner, thermal Imaging  Geometric Distortion |  |  | 5 |
|  |  | Weather satellites, Land observation satellites |  |  | 6 |
|  |  | Exam |  |  | 7 |
|  |  | Micro wave remote sensing, Radar Basics |  |  | 8 |
|  |  | Viewing geometry& Spatial resolution |  |  | 9 |
|  |  | Image Distortion, Target interaction |  |  | 10 |
|  |  | Image properties  Applications of Microwave remote sensing |  |  | 11 |
|  |  | Image processing, Visual interpretation, Digital processing |  |  | 12 |
|  |  | Enhancement |  |  | 13 |
|  |  | Transformation |  |  | 14 |
|  |  | classification |  |  | 15 |
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| ***15. Infrastructure*** | | |
| Introduction to remote sensing  Introduction to microwave remote sensing | Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER | |
|  | Special requirements (include forexample workshops, periodicals,IT software, websites) | |
|  | Community-based facilities  (include for example, guest  Lectures , internship,field studies) | |
| ***16. Admissions*** | | |
|  | | Pre-requisites |
| 20 | | Minimum number of students |
| 40 | | Maximum number of students |
| Dr. Maythm Al-Bakri | | ***17. Course Instructors*** |

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