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**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 and demonstrate 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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| Engineering College | ***1. Teaching Institution*** |
| University of Baghdad/ Department of Surveying | ***2. University Department/Centre*** |
| Photogrammetry II | ***3. Course title/code & Description*** |
| BSc in Surveying Eng. (3rd Stage) | ***4. Programme(s) to which it Contributes*** |
| Annual | ***5. Modes of Attendance offered*** |
| 2017-2018 | ***6. Semester/Year*** |
| 150 | ***7. Number of hours tuition (total)*** |
|  | ***8. Date of production/revision of this specification*** |
| ***9. Aims of the Course*** | |
| The course aims to introduce the analytical geometry of photogrammetry as a core subject in Surveying Engineering and apply it numerically with applications on a real field projects supported by theory principals and analysis. | |

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| ***10·*** ***Learning Outcomes*** |
| The student should deliver a complete knowledge and practical experience of applying photogrammetric solution to solve Surveying problems. |
| ***11.*** ***Teaching and Learning Methods*** |
| This includes, lectures, tutorials, reports, and technical practicals |
| ***12. Assessment Methods***  Exams and reports |
| ***13. Grading Policy***    Annual grades from exams, reports, etc + grade from the final exam |

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| ***14. Course Structure*** | | | | | |
|  |  |  |  |  | Week |
|  |  | **INTRODUCTION & OVERVIEW: Photo geometry and fundamental of photogrammetric measurements** |  |  | 1 |
|  |  | **STEREOSCOPIC VIEWING: Depth conception, stereoscope, y-parallax, vertical exaggeration, stereoscopic parallax, floating mark, parralax equation** |  |  | 5 |
|  |  | **STEREOSCOPIC PLOTTING INSTRUMENTS (analouge and analytical): Inner, relative and absolute orientation** |  |  | 5 |
|  |  | **Coordinate transformation**  **PHOTO RESECTION AND INTERSECTION [analytical] – resection and intersection (sigle photo), relative and absolute orientation (stereo)** |  |  | 4 |
|  |  | **PLANIMETRIC MAPPING: Rectification, Georeferencing, Mosaic** |  |  | 5 |
|  |  | **GEOMETRY OF AERIAL STEREO-PAIR: Analytical solution (collinearity & coplanarity)** |  |  | 5 |
|  |  | **AEROTRIANGULATION: Aerotriangulation and block adjustment** |  |  | 5 |
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| ***15. Infrastructure*** | | |
| المسح التصويري التحليلي Elements of Photogrammetry | Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER | |
| Programming in Matlab | Special requirements (include for example workshops, periodicals, IT software, websites) | |
| NA | Community-based facilities  (include for example, guest  Lectures , internship , field studies) | |
| ***16. Admissions*** | | |
|  | | Pre-requisites |
| 10 | | Minimum number of students |
| 40 | | Maximum number of students |
| Dr. Fanar M. Abed | | ***17. Course Instructors*** |

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