# مادة (27) متطلبات التخصص

42 ساعة معتمدة (18 ساعة إجباري + 24 ساعة اختياري) في الجداول التالية يتم توزيع مقررات التخصص لكلٍ من تخصصات الكلية.

# جدول 9. مقررات تخصص علوم الحاسب

|   | Code  | Course Name                            | Credit |  |
|---|-------|--|--------|--|
| Compulsory<br>Courses                     | CS311 | Algorithm Design and Analysis          | 3      |  |
|   | CS342 | Automata and Language Theory           | 3      |  |
|   | CS352 | Image Processing                       | 3      |  |
|   | CS431 | Parallel Computation                   | 3      |  |
| sory                                      | CS441 | Compiler Construction                  | 3      |  |
|   | CS471 | Introduction to Computer Security      | 3      |  |
|   | •     | Subtotal                               | 18     |  |
|   | CS353 | Advanced Computer Graphics             | 3      |  |
|   | CS421 | Advanced Operating Systems             | 3      |  |
|   | CS442 | Programming Language Design            | 3      |  |
|   | CS451 | Computer Animation                     | 3      |  |
|   | CS452 | Computer Vision                        | 3      |  |
|   | CS461 | Intelligent Systems                    | 3      |  |
| Εle                                       | CS462 | Machine Learning                       | 3      |  |
| <u> </u>                                  | CS463 | Pattern Recognition                    | 3      |  |
| ve  | CS472 | Cryptography                           | 3      |  |
| Elective Courses*                         | CS491 | Software Quality Assurance and Testing | 3      |  |
| Sm  | IS411 | Advanced Database                      | 3      |  |
| es*                                       | IS412 | Distributed and Object Databases       | 3      |  |
|   | IS414 | Data Mining and Business Intelligence  | 3      |  |
|   | IT431 | Wireless and Mobile Computing          | 3      |  |
|   | IT432 | Network Programming                    | 3      |  |
|   | MM402 | Virtual Reality                        | 3      |  |
|   | CE421 | Advanced Computer Architecture         | 3      |  |
|   | CE422 | Embedded Systems                       | 3      |  |
|   |       | Subtotal                               | 24     |  |
| Total                                     |       |  |        |  |
| * يختار الطالب عدد ( 8 ) مقرر اختياري فقط |       |  |        |  |

### جدول 10. مقررات تخصص نظم المعلومات

|   | Code  | Course Name                              | Credit |  |  |
|---|-------|--|--------|--|--|
|   |       |  |        |  |  |
| Compulsory                                | IS311 | Geographical Information Systems         | 3      |  |  |
|   | IS341 | Decision Support Systems                 | 3      |  |  |
|   | IS342 | IS Strategy, Management and Acquisition  | 3      |  |  |
|   | IS412 | Distributed and Object Databases         | 3      |  |  |
| s or,                                     | IT411 | Information Assurance and Security       | 3      |  |  |
|   | IT441 | Enterprise Architecture                  | 3      |  |  |
|   |       | Subtotal                                 | 18     |  |  |
|   | IS321 | Advanced Project Management              | 3      |  |  |
|   | IS411 | Advanced Database                        | 3      |  |  |
|   | IS413 | Web Information Systems                  | 3      |  |  |
| 핃   | IS414 | Data Mining and Business Intelligence    | 3      |  |  |
| Elective Courses*                         | IS415 | Database Administration                  | 3      |  |  |
| ive                                       | IS416 | Transaction Processing                   | 3      |  |  |
| င   | IS417 | Multimedia Databases                     | 3      |  |  |
| l I                                       | IS441 | Quality Assurance of Information Systems | 3      |  |  |
| Ř   | IS442 | IS Application Development               | 3      |  |  |
| •   | IS451 | Social Information Systems               | 3      |  |  |
|   | IT471 | E-commerce                               | 3      |  |  |
|   | MM412 | Human Computer Interaction               | 3      |  |  |
|   |       | Subtotal                                 | 24     |  |  |
|   |       | Total                                    | 42     |  |  |
| * يختار الطالب عدد ( 8 ) مقرر اختياري فقط |       |  |        |  |  |

# جدول 11. مقررات تخصص تكنولوجيا المعلومات

|   | Code  | Course Name                           | Credit |  |  |
|---|-------|---------------------------------------|--------|--|--|
| Compulsory<br>Courses                     | IT311 | Network Security                      | 3      |  |  |
|   | IT331 | Network Management                    | 3      |  |  |
|   | CS352 | Image Processing                      | 3      |  |  |
|   | IT431 | Wireless and Mobile Computing         | 3      |  |  |
|   | IT441 | Enterprise Architecture               | 3      |  |  |
|   | IT451 | Network Analysis and Design           | 3      |  |  |
|   |       | Subtotal                              | 18     |  |  |
|   | IT432 | Network Programming                   | 3      |  |  |
|   | IT433 | Network Forensics                     | 3      |  |  |
|   | IT452 | Networked Embedded Systems            | 3      |  |  |
|   | IT471 | E-commerce                            | 3      |  |  |
|   | CS431 | Parallel Computation                  | 3      |  |  |
| Εle                                       | CS451 | Computer Animation                    | 3      |  |  |
| Ct.                                       | CS452 | Computer Vision                       | 3      |  |  |
| ve  | CS461 | Intelligent Systems                   | 3      |  |  |
| C   | IS321 | Advanced Project Management           | 3      |  |  |
| Elective Courses*                         | IS411 | Advanced Database                     | 3      |  |  |
| œ,  | IS412 | Distributed and Object Databases      | 3      |  |  |
|   | MM301 | Introduction to Multimedia Technology | 3      |  |  |
|   | MM411 | Virtual Reality                       | 3      |  |  |
|   | MM412 | Human Computer Interaction            | 3      |  |  |
|   | CE421 | Advanced Computer Architecture        | 3      |  |  |
|   | CE422 | Embedded Systems                      | 3      |  |  |
|   |       | Subtotal                              | 24     |  |  |
|   |       | Total                                 | 42     |  |  |
| * يختار الطالب عدد ( 8 ) مقرر اختياري فقط |       |                                       |        |  |  |

# جدول 12. مقررات تخصص تصميم الوسائط المتعددة

|  | Code  | Course Name                            | Credit |  |  |
|--|-------|--|--------|--|--|
| Compulsory                               | MM302 | Introduction to Digital Video          | 3      |  |  |
|  | MM321 | 3D Modeling and Animation              | 3      |  |  |
|  | MM401 | Interactive Multimedia Development     | 3      |  |  |
|  | MM411 | Virtual Reality                        | 3      |  |  |
| sor,                                     | CS451 | Computer Animation                     | 3      |  |  |
| 7  | CS452 | Computer Vision                        | 3      |  |  |
|  |       | Subtotal                               | 18     |  |  |
|  | MM402 | Scripting and Storyboarding            | 3      |  |  |
|  | MM403 | Digital Sound                          | 3      |  |  |
|  | MM412 | Human Computer Interaction             | 3      |  |  |
| E  | MM421 | 3D Photography and Geometry Processing | 3      |  |  |
| Ĝ.                                       | MM422 | Principles of 2D Animation             | 3      |  |  |
| ve                                       | CS352 | Image Processing                       | 3      |  |  |
| , C                                      | CS453 | Game Programming                       | 3      |  |  |
| Elective Courses*                        | CS353 | Advanced Computer Graphics             | 3      |  |  |
| <b>8</b> *                               | CS463 | Pattern Recognition                    | 3      |  |  |
|  | CS471 | Introduction to Computer Security      | 3      |  |  |
|  | IS417 | Multimedia Databases                   | 3      |  |  |
|  | IT371 | Web Programming                        | 3      |  |  |
|  |       | Subtotal                               | 24     |  |  |
|  |       | Total                                  | 42     |  |  |
| * يختار الطالب عد ( 8 ) مقرر اختياري فقط |       |  |        |  |  |