**A-level Computing (2510)**

**Unit 4 The Computing Practical Project (COMP4)**

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| Centre number |  | Centre name |
| 64395 |  | Godalming College |
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**Section 1 - The Project**

*To be completed by the candidate and returned to the teacher for approval before the project is started*

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| Project title |       |
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| **Outline description**      |

**Section 2 - Project development**

*To be completed by the candidate and teacher.*

The candidate **(C)** and the teacher **(T)** should indicate which items are present in each section by selecting/ticking the appropriate boxes, providing the related page reference

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| **Analysis** | **C** | **T** | **Page** |
| Background to/identification of problem | [ ]  | [ ]  |       |
| Description of the current system | [ ]  | [ ]  |       |
| Identification of the prospective user(s) | [ ]  | [ ]  |       |
| Identification of user needs and acceptable limitations | [ ]  | [ ]  |       |
| Data source(s) and destination(s) | [ ]  | [ ]  |       |
| Data volumes | [ ]  | [ ]  |       |
| Analysis Data Dictionary | [ ]  | [ ]  |       |
| Data flow diagrams (DFDs) (existing and proposed systems) | [ ]  | [ ]  |       |
| Entity-relationship (E-R) model (if appropriate), E-R diagrams, entity descriptions | [ ]  | [ ]  |       |
| Object analysis diagrams - inheritance, aggregation (if appropriate) | [ ]  | [ ]  |       |
| **Numbered** general and specific objectives of the project | [ ]  | [ ]  |       |

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| **Analysis (continued)** | **C** | **T** | **Page** |
| Realistic appraisal of the feasibility of potential solutions | [ ]  | [ ]  |       |
| Justification of chosen solution | [ ]  | [ ]  |       |
| Evidence of use of appropriate analysis techniques | [ ]  | [ ]  |       |

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| **Design** | **C** | **T** | **Page** |
| Overall system design | [ ]  | [ ]  |       |
| Description of modular structure of system | [ ]  | [ ]  |       |
| Definition of data requirements (Design Data Dictionary) | [ ]  | [ ]  |       |
| Description of record structure (if appropriate) | [ ]  | [ ]  |       |
| Validation required | [ ]  | [ ]  |       |
| File organisation and processing (if appropriate) or database design including normalised relations (if appropriate) | [ ]  | [ ]  |       |
| Sample of planned SQL queries (if appropriate) | [ ]  | [ ]  |       |
| Identification of storage media | [ ]  | [ ]  |       |
| Identification of suitable algorithms for data transformation, pseudocode of these algorithms | [ ]  | [ ]  |       |
| Class definitions (diagrams) and details of object behaviours and methods (if appropriate) | [ ]  | [ ]  |       |
| User interface design (HCI) rationale | [ ]  | [ ]  |       |
| UI sample of planned data capture and entry designs | [ ]  | [ ]  |       |
| UI sample of planned valid output designs | [ ]  | [ ]  |       |
| Description of measures planned for security and integrity of data | [ ]  | [ ]  |       |
| Description of measures planned for system security | [ ]  | [ ]  |       |
| Overall test strategy | [ ]  | [ ]  |       |

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| **Technical Solution** |
| Evidence for this section may come from copies of code listings in the appendix and/or details of software tailoring included in the systems maintenance section. It is not expected that candidates will supply multiple copies of listings, systems or algorithm design documentation. |

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| **System testing** | **C** | **T** | **Page** |
| Design of test plan | [ ]  | [ ]  |       |
| A minimal set of test data | [ ]  | [ ]  |       |
| Expected results for typical, erroneous and extreme (boundary) data where appropriate | [ ]  | [ ]  |       |
| Annotated hard copy of samples of actual test runs | [ ]  | [ ]  |       |
| Cross-referenced to the test plan | [ ]  | [ ]  |       |

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| **System maintenance** | **C** | **T** | **Page** |
| System overview | [ ]  | [ ]  |       |
| A sample of detailed algorithm design | [ ]  | [ ]  |       |
| Procedure and variable lists/descriptions for programs OR list of package items developed | [ ]  | [ ]  |       |
| Annotated listings of program code/macro code and tailoring | [ ]  | [ ]  |       |

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| **User manual, including Quality of Written Communication** | **C** | **T** | **Page** |
| A brief introduction and installation instructions | [ ]  | [ ]  |       |
| Detailed description of the use of the full system | [ ]  | [ ]  |       |
| Samples of actual screen displays in situ | [ ]  | [ ]  |       |
| Samples of error messages and error recovery procedures | [ ]  | [ ]  |       |
| Quality of Written Communication | [ ]  | [ ]  |       |

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| **Appraisal** | **C** | **T** | **Page** |
| Comparison of project performance against numbered general and specific objectives | [ ]  | [ ]  |       |
| User feedback authenticated by assessor | [ ]  | [ ]  |       |
| Analysis of user feedback | [ ]  | [ ]  |       |
| Possible extensions | [ ]  | [ ]  |       |

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*This form should be attached to the candidate’s work and retained at the centre or sent to the moderator as required.*