This form is to be used for the submission of a new subject proposal for endorsement by the Faculty Courses Committee and approval by the Faculty Board. It should be submitted along with the **Curriculum Changes Template B**.

An explanation of the information required in each field is available in the online [CIS documentation](https://cis.uts.edu.au/documentation/subjectoutlines/fields.html).

Upon approval by Faculty Board and the subject being set up on CASS, FEIT T&L Support staff will load the approved information in the template in CIS on behalf of the Subject Coordinator. Any changes to the Subject Outline after approval by the Faculty Board will be handled according to the Faculty’s SoP on the preparation of Subject Outlines.

**Contacts**

Teaching & Learning Design Team: [FEIT.TLDT@uts.edu.au](mailto:FEIT.TLDT@uts.edu.au)

*For administrative information and support:*

Faculty Courses Committee Secretary: ext. 9242

Teaching & Learning Support Manager: ext. 3542

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| **Subject name** | Data Literacy |
| **Subject number** |  |
| **Credit points** | 1 |
| **Admission requisites** | Intended audience is professionals with a capacity to undertake postgraduate tertiary education. Course admission requisites may apply.  Basic familiarity with spreadsheets (e.g. Microsoft Excel). |
| **Academic requisites** | Nil |
| **Anti-requisites** |  |
| **Teaching org unit** | Computer Science |
| **Course area** | 031305 |
| **Subject level** | 8 |
| **Subject category** | Microcredential |
| **Subject classification** | Microcredential |
| **Result type** | Grade Mark |
| **Attendance** | Online |
| **Subject coordinator** | Associate Professor Katarzyna Musial-Gabrys  Associate Professor in Network Science,  Advanced Analytics Institute,  School of Computer Science,  Faculty of Engineering and IT,  University of Technology Sydney  email [katarzyna.musial-gabrys@uts.edu.au](mailto:katarzyna.musial-gabrys@uts.edu.au)  tel.: +61 2 9514 4491  [The preferred means of contact is via the LMS Discussion Board and UTS email.] |
| **Subject assessor** | Paul Kennedy, Professor, School of Computer Science |

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| **Subject description** Data literacy is the basic ability to read, understand and represent data in a given context. It also enables professionals to describe the use case, application and resulting value and communicate to the stakeholders in a clear, appropriate way. Data literacy can be seen as learning to communicate in a new shared language of data and is now a core skill for any organization working with data.  This microcredential introduces the learner into the world of data and basic concepts required to work in a data-minded organization, and can act as an on-ramp to further study in data science, analytics or statistics. |

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| **Subject Learning Objectives (SLO)**  Each SLO should clearly express one learning outcome, following the pattern of ‘verb-content-context’:  E.g.: Identify and analyse security vulnerabilities in computer systems.  Upon successful completion of this subject students should be able to: | | | | |
|  | **SLO description** | **Short description** | **Graduate Attributes (Max 2)** | |
| 1 | Demonstrate an understanding and clearly communicate key concepts and relevant information from a data set | Data understanding | D. Technically Proficient | Choose an item. |
| 2 |  |  | Choose an item. | Choose an item. |
| 3 |  |  | Choose an item. | Choose an item. |
| 4 |  |  | Choose an item. | Choose an item. |

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| **Assessment Tasks** | | | | | |
|  | **Heading** | **Type** | **Group work** | **Weight (%)** | **SLO** |
| 1 | Data Exploration Report | Project | Individual | 100 | 1 |
| 2 |  | Choose an item. | Choose an item. |  |  |
| 3 |  | Choose an item. | Choose an item. |  |  |
| 4 |  | Choose an item. | Choose an item. |  |  |

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| **Teaching and learning strategies** | Microcredential presentation includes weekly synchronous one-hour online workshops facilitated by an expert UTS academic(s) supporting self-study and online (LMS) learning activities. Case studies of real-world business illustrate applications of data understanding techniques. The workshop sessions focus on hands-on experience in data understanding and interpretation. Regular formative activities throughout the semester will allow learners to gauge their progress. |
| **Content (Topics)** | * What data is and key characteristics of data * The most common statistics used to describe data * An understanding of uncertainty * Correlation vs causation * Some common errors and biases * Basic ways to visualise data * How to communicate a data set and its relevance to different groups * How different industries are using data? – use cases |
| **Assessment: Generic information** | Formative activities and a graded assessment with a focus on application of knowledge and demonstrated reflection upon practical skills. |
| **Assessment feedback** | Automated feedback on activities is upon completion of the tasks in the LMS content. Synchronous online workshops and moderated LMS discussion board enable formative feedback on practical skills development and assessment progress. Feedback on the graded assessment is via the LMS Assignment marking rubric within 2 weeks of submission. |
| **Minimum requirements** | In order to pass the microcredential, a learner must achieve an overall mark of 50% or more. |
| **Required texts** | Nil |
| **Recommended texts** | Nil |

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| **Assessment Task 1** | |
| **Intent** | Data Exploration Report – data exploration and preparation |
| **Task** | The graded assesment task is an individual written assessment on data exploration. The task requires to employ the newly-developed skills, concepts and terminology to understand, represent, and communicate a data set and its relevance to different groups of stakeholders. |
| **Length** | 1,000 words |

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| **Assessment Task 2** | |
| **Intent** |  |
| **Task** |  |
| **Length** |  |

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| **Assessment Task 3** | |
| **Intent** |  |
| **Task** |  |
| **Length** |  |

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| **Assessment Task 4** | |
| **Intent** |  |
| **Task** |  |
| **Length** |  |