THE UNIVERSITY *of* EDINBURGH
informatics

Course Proposal Form

Please see Page 2 for instructions on which parts of this form to complete, whom to consult with to avoid unnecessary effort, and where to send the completed form.

Proposer(s): Adam Carter (EPCC)　　　　　　**Date:** 2019-12-02

Cover page: Basic permanent course information

Unless otherwise noted, items in this section are entered into EUCLID and **cannot** be changed without creating an entirely new course.

Course Name	Practical Introduction to Data Science (short course)
Course Acronym *(used by the School only, e.g., for the Sortable Course List)*	PIDS10
Course Level If the course is **only** available to MSc students, then it must be classed as Postgraduate. All other courses, regardless of level, are Undergraduate.	__Undergraduate _X_ Postgraduate
Normal Year Taken	__UG1　__UG2　__UG3　__UG4　__UG5　_X_ MSc
Also available in years *[This can be changed later if need be.]*	__UG1　__UG2　__UG3　__UG4　__UG5　__MSc
SCQF Credit Level Level 8 should normally be used for pre-honours courses. Level 10 should normally be used for optional UG3 courses (so UG4 students may also take them) and for courses aimed mainly at UG4 students. Level 11 should be used for courses aimed mainly at MSc students, whether or not UG4 students can also take them.	__7　__8　__9　__10　_X_ 11
SCQF Credit Points	_X_ 10　__20　__40　__60　__80 __Other:
Delivery Location	__Campus　　　_X_ On-line Distance Learning
Course Type	__Standard (default) __Dissertation _X_ Online Distance Learning __Other (specify: Placement, Student Led Individually Created Course, Year Abroad)
Marking Scheme By default, courses use a numerical marking scheme. If you wish to use a grade-only marking scheme, your course proposal below should justify this.	_X_ Standard (numerical) __Letter grade only

Guidance for remaining sections:

For an initial course proposal, please complete the **cover page and Section 1 (Case for Support)**, which asks you to describe the need for this course and to provide an overview of the course design, including the learning outcomes. **Please discuss your plans as early as possible with the head of Curriculum Review to avoid unnecessary effort.**

Send the form with these sections completed to the BoS Academic Secretary and head of Curriculum Review (listed on the BoS page) to obtain their comments before filling out the remainder of the form.

If a full proposal is invited, please complete the remaining sections and send to **iss-bos@inf.ed.ac.uk**.

2. Student-facing course description and additional feedback and assessment information.
This section provides most of the information students see in the DRPS entry for this course, as well as related details for BoS consideration.

3. Further information for BoS consideration: sample materials.

4. Additional Course Details required for DRPS. *[Administrative information such as delivery timing and prerequisites.]*

5. Placement in degree programme tables. *[Required for all level 9-11 courses; used to determine where the course will be added to existing degree programme tables.]*

6. Comments from colleagues. *[All course proposal should be sent to relevant colleagues in the area as well as to the appropriate year organizer and BoS Academic Secretary for comment in good time before the BoS meeting. Use this section to indicate what feedback has been solicited and received.]*

Colour coding and item-by-item guidance:

Guidance is provided in italics for each item. Please also refer to the guidance for new course proposals at http://www.inf.ed.ac.uk/student-services/committees/board-of-studies/course-proposal-guidelines. Examples of previous course proposal submissions are available on the past meetings page http://web.inf.ed.ac.uk/infweb/admin/committees/bos/meetings-directory but note that the proposal form was updated in Jan 2019.

Sections in gold are for student view and are required before a course can be entered into DRPS. You must complete these sections even if your course has already been approved based on other documentation.

Sections in orange are for School use but are still required for all courses (even those that have already been approved based on other documentation).

Section in gray are for consideration by the Board of Studies. They are normally required for all new course proposals but may be omitted in some circumstances (e.g., for invited course proposals) if you obtain permission in advance.

1. **Case for support**

This section is for consideration by the Board of Studies. The final two boxes (Learning Outcomes, Graduate Attributes) will also go into the student-facing course description.

Overall contribution to teaching portfolio and relation to existing curriculum

Please explain (a) what motivates the course proposal (e.g. a previous course having become outdated/inappropriate, an emergent or maturing research area or new research activity in the School, offerings of our competitors) and (b) how it relates to existing courses and degree programmes (including any prerequisite courses). Every new course should make an important contribution to the delivery of our [Degree Programmes](.).

This course proposal was motivated by a call from the Senior Vice Principal to propose new courses to atttact funding from the SFC's Workforce Upskilling Fund which was announced during this academic year. In order to receive funding, the courses must be delivered this academic year. The course is designed to address the need to teach data science skills to people already in (full-time) employment. The existing online programme in *Data Science, Technology & Innovation* goes some way to addressing this need through its PPD courses, in particular the existing course *Practical Introduction to Data Science*, but this course is constrained in terms of its size and timetabling in order to best support the Masters programme. The aim of this course was to offer an alternative, shorter course delivered in a fixed 10-week block (starting March 2020) to better address the needs of companies wishing to make shorter-term provision for their staff to join courses. We also expect to adapt this shorter course in future years to lower its level, to better fit with SFC's aims. Given the limited time available, this new course will be adapted from an existing level 11 course, and as such, it would be delivered as a level 11 course in 19/20.

The course will be based on the first half of the existing 20-credit course *Practical Introduction to Data Science*, but with some amendments to improve accessibility and with the creation of a new assessment.

Target audience and expected demand

Describe the type of student the course would appeal to in terms of background, level of ability, and interests, and the expected class size for the course based on anticipated demand. A good justification would include some evidence, e.g. by referring to projects in an area, class sizes in similar courses, employer demand for the skills taught in the course, etc

We expect a demand for this course based on the fact that it aligns with the DDI programme's aims to train more people in data-related areas. The University recently did work to explore offering postgraduate apprenticeships in this area and whilst this has not (yet?) come to fruition, there appears to be a demand from organisations to have a University-delivered courses available in this area. Whilst the time to market these courses is short, the SFC funding allows us to offer the courses "for free" to approved candidates, and we therefore expect there to be good demand. We hope to attract 30-40 students on to the course.

Anticipated Resource Requirements

Estimate how much lecturing, tutoring, exam preparation and marking effort will be needed in steady state, and any additional resources needed to set the course up initially. Provide estimates relative to class size where applicable and

discuss how support staff will be recruited and supervised, if the class is likely to be very large. Please mention any scaling limits due to equipment or space. If equipment is required, say how it will be procured and maintained.]

This course will be delivered by EPCC using a model equivalent to existing online courses in the DSTI programme such as *Practical Introduction to Data Science*. The course will be taught and assessed by EPCC staff, using mostly EPCC systems (with the exception of a DICE SSH login) and will primarily be administered by EPCC (for student support and course secretary), supported through the School of Informatics: Standard School processes will be used for the Special Circumstances Committee and academic misconduct.

Quotas, special arrangements or unusual characteristics
Please specify if this course requires any special arrangements such as quotas or other registration arrangements; is a collaboration with another school or institution, or has other atypical characteristics that may affect finances or student registration. Further justification/information may be requested for such courses.

Students will be admitted using a central admissions process that is still being finalised, but which will be common to other University courses being funded through this SFC call. This will not be an open course and will be delivered at a postgraduate level, but some provision may be made to ensure that students with sufficient workplace experience (but possibly without a relevant undergraduate degree at 2:1) can be accepted on to the programme/course.

Final details are still to be finalised, but it is expected that students who register for this programme will be registered as PPD students on the existing DSTI programme unless the University manages to put in place an alternative programme to accommodate the various courses proposed for this SFC call.

The course will initially only be available to people who apply for the SFC-upskilling places, and places will be capped at 40 unless additional costs are covered.

Narrative description of the course aims and structure
Please describe the main goals of the course and how the course design will allow students to achieve those goals. This section should be consistent with the student-facing information provided below, but should provide additional information to help colleagues at BoS understand the vision and structure of the course. This description may refer to the learning outcomes and graduate attributes (next two boxes) and should explain how activities such as tutorials, labs, or in-lecture activities will support them, and how the proposed assessments will assess them.

For courses that are important pre-requisites for other courses, this section may also provide content/syllabus information which is too detailed for the student-facing description, such as a lecture-by-lecture syllabus.

The aim of ths course is to teach students to apply ideas from Data Science to their work.

This online course is designed for technically-minded people and assumes some basic knowledge of computer programming. It introduces ideas from data science, data management and data engineering. It is broad rather than deep, but it aims to provide the student with enough practical skills to tackle a real data science problem by the end of the course.

The course will address the following questions:

- What is meant by Data Science and Big Data?
- What kinds of problems can I address with Data Science?
- What do Data Scientists do?
- When should I use a database rather than files?
- What file format should I use?
- What data formats are used on the web?
- Why should I move beyond working with spreadsheets?
- How can I use automation to help with me with larger data analyses that can be repeated and reproduced?
- How can I make my data more useful to others?
- How can I work with data that's too big to fit on my computer?

The proposed outline for the course is as follows:

Unit 1: Motivation & Groundwork, including:

- What is Data Science? What is Big Data?
- Download and install useful tools
- Python's basic datatypes and containers
- Introduction to Pandas
- Remote log-in & moving files
- Refresher of useful maths concepts

Unit 2: Data Concepts & Processes, including:

- Data Management Lifecycles
- Data Analysis processes, such as CRISP-DM
- Data Science Roles: What Data Scientists Do

Unit 3: Munging, Cleaning, Storing, Accessing

- Common File Formats, including CSV, XML and JSON
- Relational Databases and SQL
- Data Cleaning Techniques

Unit 4: Exploring, Summarising, Visualising

- Exploratory Data Analysis, including plotting data
- Descriptive Statistics
- Unsupervised Learning: Clustering

Unit 5: Infer & Experiment

- Predictive Analytics
- Supervised Learning: Classification & Regression

Unit 6: Describing & Sharing

- Making data findable, accessible, interoperable & re-usable

- Metadata
- Persistent Identifiers

Unit 7: Deploying & Scaling

- Map Reduce
- Hadoop

Summary of Intended Learning Outcomes (MAXIMUM OF 5)

*List the learning outcomes of the course. These must be assessable (i.e., observable), so must specify what the student should be able to do concretely, not simply what they should "understand". Use concrete verbs that indicate (a) what type of assessment would be appropriate, and (b) what level of knowledge/thinking is expected (from recall to analysis to novel creation). **Example verbs:** define, explain, implement, compare, justify. Assessments (described later) should be tied to the learning outcomes.*

Outcomes should typically focus more on the types of thinking/skills developed than on the detailed course content, and the level of thinking should be appropriate to the level of the course: outcomes for a Level 11 course should include more higher-level thinking skills than for a Level 8 course. Further guidance on writing learning outcomes can be found at https://www.ncl.ac.uk/ltds/assets/documents/res-writinglearningoutcomes.pdf

On completion of this course, the student will be able to

1) Explain the meaning of data analytics, data science and big data and appreciate the importance of data management

2) Describe and apply important data analytics techniques including basic descriptive statistics, clustering and classification

3) Identify appropriate data storage mechanisms and analytic techniques for a given problem

4) Assess the value of metadata, identifiers and related data management concepts in a given scenario

Graduate Attributes, Personal & Professional Skills

List the personal attributes and generic transferrable skills this course will help develop. Examples include
***Cognitive skills:** problem-solving, critical/analytical thinking, handling ambiguity*
***Responsibility, autonomy, effectiveness:** independent learning, self-awareness and reflection, creativity, decision-making, leadership, organization and time management, flexibility and change management, ethical/social/professional awareness and responsibility, entrepreneurship*
***Communication:** interpersonal/teamwork skills, verbal and/or written communication, cross-cultural or cross-disciplinary communication*

- Critical thinking
- Communication of complex ideas in accessible language
- Working in an interdisciplinary field
- Programming and Scripting
-Effective written and diagrammatic communication.

-Data analysis.
-Solution Exploration, Evaluation and Prioritisation.

2. Student-facing course description and additional feedback and assessment information

Except where noted, all fields are required and will go into the DRPS entry for the course (for use by students). Important: any text in DRPS is effectively a contract with students, so should not include details that are likely to change from year to year.

Summary Description *Provide a brief official description of the course, around 100 words. This should be worded in a student-friendly way, it is the part of the descriptor a student is most likely to read. If this course replaces another course, please say so in this summary.*	This online course is designed to help you apply ideas from Data Science to you work. It is designed for technically-minded people and assumes some basic knowledge of computer programming. It introduces ideas from data science, data management and data engineering. It is broad rather than deep, but it aims to provide you with enough practical skills to tackle a real data science problem by the end of the course.
Keywords *Give a list of searchable keywords.*	Data Science, Data Engineering, Data Management, Online, Machine Learning, Data Analytics
Course Description *A more detailed student-facing description of the course, which should normally include (a) a more in-depth academic description of the learning aims, nature and context of the course, (b) a rough outline of the content or syllabus, often as bullet points, and (c) a description of how the course will be taught, how students are expected to engage with their learning and how they will be expected to evidence and demonstrate their achievement of the intended learning outcomes.]*	The 10-week course is made up of 7 taught blocks followed by an assessed piece of coursework. The taught blocks will cover: • Motivation & Groundwork • Data Concepts & Processes • Munging, Cleaning, Storing & Accessing • Exploring, Summarising & Visualising • Experimenting & Predicting • Describing & Sharing • Deploying & Scaling The course is based around recorded lectures, broken into short videos. These recorded lectures will be complemented with a weekly interactive online tutorial with the course organiser which will allow students to ask questions and discuss topics of interest. The concepts and ideas introduced in the lectures are explored in practical exercises to give hands-on experience of applying the techniques.
Assessment Weightings: *These should correspond approximately to the proportion of learning outcomes that each component assesses. More than 30% coursework requires specific justification.* *The expectation for a 10pt course is 20% coursework with the equivalent of one 15-20hr assessed assignment (but possibly split into smaller pieces). See 'components of assessment' below.*	Written Exam _____% Practical Exam _____% (*for courses with programming exams*) Coursework _100_%

Further Assessment Information *Provide any further information that should go on DRPS for students. E.g., if the assessment includes required group work or if students must pass some individual component of assessment as well as the course overall.*	
Components of assessment and time spent on assignments (for BoS only) *If not already included in the course narrative description, please describe the type of assessments (oral presentation, report, programming, etc) and how each component of assessment will assess the intended learning outcomes. Where coursework involves group work, it is important to remember that every student has to be assessed individually for their contribution to any jointly produced piece of work.* *Also estimate how many hours students will spend on assignments. Please see the School policy on Workload and Assessment, which states that students should not be expected to spend more than 6-7 hrs/wk per 10 credits, including contact hours.* *Note that it often desirable to include formative assignments which are not formally assessed but submitted for feedback, often in combination with peer assessment.*	The assessment will be a single piece of assessed coursework set towards the end of the course. This will include a written component and a practical component which will involve the students doing some basic analysis with a real world dataset. The written answers will be submitted in a short report which will also describe the practical work undertaken. The assessment is designed to take no more than 20 hours, and the students will have at least four weeks to undertake the assignment from when it is posted to the deadline.
Feedback Information *Provide a high-level description of how and what type of feedback will be provided to students, for inclusion in DRPS.*	Students will receive written feedback with their mark for the assessment. Practical exercises during the course are not assessed, but form an integral part of the course. Students are invited to submit work undertaken in practical exercises for discussion at tutorials. A short example question will be set around week 4. Submission of this piece of work is optional, but individual formative feedback will be provided before the course assessment.
Additional Feedback Information (for BoS use only) *If not already included in the course narrative, provide further details on planned feedback arrangements. This includes how course feedback is solicited from the class and responded to, as well as what feedback students will get (either on work that contributes to their final mark, or not).* *The University is committed to a baseline of principles regarding feedback that we have to implement at every level, and the School*	

encourages submission of at least one piece of written work for formative feedback.

In general, formative feedback:
- *Should say how students can improve.*
- *Need not be on individual work (e.g., consider a lecture or document summarizing common issues.)*
- *Can include oral feedback during labs/tutorials*
- *Can include feedback from peers*
- *Clickers/TopHat/equivalents can provide in-class feedback for both students and lecturer.*
- *Is returned in time for other forms of assessment to which it relates, to allow feedforward.*

Breakdown of Learning and Teaching Activities
State how many hours students spend on each part of the course. The total should be 10 x course credits, but please also see the School policy on Workload and Assessment.which states that students should not be expected to spend more than 6-7 hrs/wk per 10 credits, including contact hours.

Assume 10 weeks of lectures slots and 10 weeks of tutorials, but these need not all be used. As a guideline, a 10-pt course typically has 18-20 lecture hours, but should have only around 15 lectures of examinable material; the rest should be used for guest lectures, revision sessions, introductions to assignments, etc.

Contact hours

Hours	Type
	Lecture Hours
5	Seminar/Tutorial Hours
	Dissertation Project Supervision Hours
	Supervised practical/Workshop/Studio hours
5	Feedback/Feedforward hours
20	Summative assessment hours
	Revision Session Hours

Non-contact hours

Hours	Type
70	Directed Learning* & Independent Learning hours

* Directed learning includes watching of video lectures and doing practical exercises.

Total hours: 100

Reading List/Learning Resources
You are encouraged to create resource lists using LEGANTO

There is no compulsory course text for this course. For students who like learning from text books, I recommend *Doing Data Science*, C. O'Neil & R. Schutt (ISBN: 1449358659) which overlaps with the course material and has the same practical ethos as the course. Full text is available free online to UoE students.

3. Further information for BoS consideration: sample materials

A full proposal for a new course must include examples of exercises and assessment. Please provide these below, along with publicity information if the course is to be advertised outwith the School.

Course information and publicity *The course web page (typically the Learn landing page) will be linked from the Sortable Course List, and information such as timetables and assignment deadlines must be made available prior to the start of the academic year. Please specify here if any additional info/publicity is needed for your course: typically only if it is aimed largely at non-SoI students.*	Not yet available. A central UoE online presence is anticipated for these SFC-funded courses.
Sample tutorial/lab sheet questions *Provide a list of tutorial questions and answers and/or samples of lab sheets. These need not be fully fleshed out but should indicate what sort of exercises will be provided to help students learn the material.*	See attached PDF file with a practical exercise which is an example of the kind of things that the students would undertake.
Sample assessment materials *If the course is primarily assessed by **exam**, provide a sample exam question with model answers. Any non-standard exam format must be justified. The online list of past exam papers gives an idea of typical and alternative exam formats:* *http://www.inf.ed.ac.uk/teaching/exam_papers/.* *If the course is largely or primarily assessed by **coursework**, provide a sketch of a possible assignment with an estimate of effort against each sub-task and a description of marking criteria.*	An assessment might include 2 parts. The first part might be worth 25% of the marks, and might consist of a question similar to the following: *Pick two data lifecycle models (either two from the course materials or one from the course and one from an alternative (cited) source). Describe the features that they have in common, and describe two ways in which they differ. Explain these two differences by considering the context in which the lifecycle is used (research, commerce, archiving, etc.) or by making an argument for which you consider to be better.* *You are welcome to use a diagram or diagrams if it helps to clarify your explanations.* The second part would be practical exercise along the lines of: 4. Download dataset from www.example.com 5. Clean the data, and explain the choices you've made 6. Look for clusters in the data and write up process used & decisions made (with rationale), and results obtained (with brief analysis). 7. Split the data into a training & test set. Do classification. Write up process used &

	decisions made (with rationale), and results obtained (with brief analysis).
Any other relevant materials *Include anything else that is relevant, possibly in the form of links. If you do not want to specify a set of concrete readings for the official course descriptor, please list examples here.*	

8. Additional Course Details for DRPS

Except where otherwise noted, these fields are required for entry into EUCLID and will be visible to students in the DRPS entry.

Planned Academic Year of Delivery *(The first year you anticipate the course running, e.g. AY 2019-20)*	AY 2019-20
Course Organiser *(By default, the course proposer)*	Adam Carter
Intended Delivery Period	___Semester 1 ___Semester 2 ___Full Year ___Summer _X_ Other (please specify): 10 weeks, starting in March 2020
Timetable considerations/conflicts *For School use. Please specify any constraints to be considered (e.g. overlap of popular combinations, other specialism courses, external courses etc). Include whether the semester delivery is constrained or could be flexible.*	Online. Designed to be taken stand-alone.
Is this course available to visiting students?	___Yes (default) _X_ No **If no, please provide a justification here:** This course is a stand-alone course.
Required pre-requisite courses *Use sparingly: these are enforced in PATH and can only be waived by approval from the School's Curriculum Approval Officer. Note that cross-year required pre-requisites may prevent MSc students from registering; consider using recommended pre-requisites or "other requirements" instead.*	_X_No ___Yes (please specify full course name(s) and code(s)):
Recommended pre-requisite courses	_X_No ___Yes (please specify full course name(s) and code(s)):

Required co-requisite courses *Specify any courses that must be taken in parallel with the existing course. Note that this leads to a timetabling constraint that should be mentioned elsewhere in the proposal.*	_X_ No ___ Yes (please specify full course name(s) and code(s)):
Prohibited Combinations *Specify any courses that may not be taken in combination with the proposed course].*	___ No _X_ Yes (please specify full course name(s) and code(s)): *Practical Introduction to Data Science* (**INFR11183**)
Other Requirements/Additional Information *This information is often used by MSc students and students from other Schools to see if they have appropriate background without having done our School's courses. So please avoid course titles, instead list specific knowledge and skills (such as mathematical concepts, programming ability or specific languages, etc).* *Also list any other constraints on registration, for example: "Only available to 4th Year Informatics students including those on joint degrees." or "This course is open to all Informatics students including those on joint degrees, and to students in the School of Mathematics. Other external students whose DPT does not list this course should seek permission from the course organiser."*	___ No _X_ Yes (please specify): Students should be able to program in some computer language (e.g. Python, R, C (or a variant), Fortran, Java, Swift, Go, JavaScript). Note that HTML/CSS and similar declarative programming is not sufficient. Students should be able to run a program that they have written. Students should understand key concepts such as variables, loops, functions (or methods or procedures) and conditionals. Knowledge of SQL, whilst potentially helpful for the course, would not be sufficient to meet this programming requirement by itself.
Visiting Student Pre-requisites	_X_ Same as "other requirements" ___ Different than "other requirements" (please specify):

9. Placement in degree programme tables: for level 9-11 courses only

This section is for consideration by the Board of Studies and will be used later by ITO to determine where the course will be added to existing degree programme tables.

Is this course restricted to students on a specific degree? *E.g., some courses are only available to students on a specific CDT or MSc.*	___No _X_Yes (please specify and provide justification): DSTI PPD (or an equivalent to be set up by UoE for these SFC courses)
Is this course compulsory for students on any degree(s)?	_X_No ___Yes (please specify and provide justification):
Any issues for part-time students? *Normally, part-time students have access to the same courses as full-time students on the equivalent degree. If you anticipate any problems with this, please specify here.*	All students are expected, formally, to be "part-time intermittent".

For optional courses:

If this course is available but non-compulsory for students on various degrees (most courses), please fill in this section. The choices here determine where the course appears in degree programme tables (DPTs) and the 2-3 character tags are displayed in the Informatics sortable course list.

Should this course be tagged as 'ML' (machine learning foundations and methods)? *Courses with the ML tag are typically very high-demand and most degrees limit the number of ML credits. If your course might appeal to a similar audience but draw off students from these large courses, please select 'no' and choose one of the tags below.*	___No ___Yes This is the most relevant area, but it's probably not relevant to this course as it will not sit in a usual DPT.
If you chose 'no', please choose at least one of the following tags… *Ideally, select exactly one, unless there is a good argument for more than one. These three are used in various combinations for many of our degrees.*	___**FSS** (CS foundations, systems, and software) ___**AIA** (artificial intelligence applications and paradigms) ___**COG** (cognitive science: including HCI and NLP courses, but not most other AI courses. Please restrict to courses most relevant to natural cognition.)
…and also tick if any of the following tags or categories apply. *Do not tick any of these if you selected 'ML' already.*	___**NS** (natural systems: e.g., computation by or about biological or social systems. Many COG courses are also NS. This tag is mainly relevant for MSc in Informatics.) ___**SE** (software engineering: including courses that are highly relevant to SE degrees. All SE courses should also be FSS. This tag is mainly relevant for UG SE degrees.)

	___Databases and data management systems (used for Data Science MSc and MSc(R)) ___Unstructured data and applications (used for Data Science MSc and MSc(R)) ___Level 11 Security courses (used for Security MSc)
If you are not sure which tags are most appropriate or have other questions about this section, please note any comments/issues here.	See note in top box above.

10. Comments from colleagues

All course proposal should be sent to relevant colleagues in the area as well as to the appropriate year organizer and BoS Academic Secretary for comment in good time before the BoS meeting. Please indicate here what feedback has been solicited and received.

Additional Comments *Summarise any comments received from relevant individuals prior to proposing the course. If you have not discussed this proposal with others please note this.*	The plan to run this course was discussed at our Application Group meeting in EPCC. The ideas behind the proposal were supported. Since the course content is closely related to part of an existing course, the course outline has previously been reviewed by a board of studies. The course has also been discussed with colleauges involved in the DSTI programme, and an agreement in principle has been made that this programme could be used to register students selecting this course.
Year Organiser Comments *Year Organisers are responsible for maintaining the official Year Guides for every year of study, which, among other things, provide guidance on available course choices and specialist areas. The Year Organisers of all years for which the course will be offered should be consulted on the appropriateness and relevance on the course. Issues to consider here include balance of course offerings across semesters, subject areas, and credit levels, timetabling implications, fit into the administrative structures used in delivering that year.]*	
BoS Academic Secretary Comments *Proposals must be checked by the Secretary of the Board of Studies prior to discussion at the actual Board meeting. This is a placeholder for their comments, mainly on the formal quality of the content provided above.*	(SG): made some minor comments/edits to formal aspects, above. Please note if all addressed before final BoS submission.