BSc (Hons) Logistics and Supply Chain Management

Programme Specification

Primary Purpose:
Course management, monitoring and quality assurance.

Secondary Purpose:
Detailed information for students, staff and employers. Current students should refer to the related Course Handbook for further detail.

Disclaimer:
The University of Portsmouth has checked the information given in this Programme Specification and believes it to be correct. We will endeavour to deliver the course in keeping with this Programme Specification but reserve the right to change the content, timetabling and administration of the course whilst maintaining equivalent academic standards and quality.

Contents

Programme Specification

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1. Named Awards

Logistics and Supply Chain Management

2. Course Code (and UCAS Code if applicable)

UCAS: N/A
Course: C2520F

3. Awarding Body

University of Portsmouth

4. Teaching Institution

University of Portsmouth

5. Accrediting Body

Chartered Institute for Logistics and Transportation (CILT)

6. QAA Benchmark Groups

Mathematics, Statistics, and Operational Research
General Business and Management

7. Document Control Information

Version 1.1 released 12-2004, 1st issue for validation.
Version 1.2 released 02-2005. Version 1.3 released 03-2005.
Version 1.4 released 06-2005 – change of title / incorporation FCAC requirements.
Version 1.5 released September 2005.
Version 1.6 released December 2006. Annual update
Version 1.7 released May 2008. Annual update
Version 1.8 released November 2008. Annual update
Version 1.9 released November 2009. Annual update
Version 1.10 released September 2010. Annual update
Version 1.11 – preparation for curriculum 2012 – January 2011
Version 1.12 – release September 2013. Annual update
Version 1.13 – released September 2014
Version 1.14 – released September 2015
Version 1.15 – released September 2016

8. Effective Session

2016 - 17

9. Author

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10. Faculty

Faculty of Technology

11. Department

Department of Mathematics

12. Educational Aims

The course aims to equip students to work in the area of Logistics or Supply Chain Management. In addition, and more generally, the course aims to:

- Provide a challenging, stimulating and self-rewarding study environment.
- Develop a range of keys skill by means of opportunities provided in the study units.

• Accommodate student needs in relation to maximising their career potential by enabling them to develop knowledge, understanding and skills in the subject area.

It is expected that students graduating from this course will be well placed to enter a variety of careers in Logistics and Supply Chain Management as well as more widely in industry, commerce, applied research, and education.

13. Reference Points

The major reference points were the University of Portsmouth Curricula Framework Document (2014), Subject Benchmark Statements, Framework for Higher Education Qualifications and QAA Codes of Practice. In particular the programme has been designed with the following benchmark elements in mind:

Mathematics, Statistics, and Operational Research (MSOR)

A graduate who has reached the threshold level should be able to:

(MSOR1) demonstrate a reasonable understanding of the main body of knowledge for the programme of study;

(MSOR2) demonstrate a reasonable level of skill in calculation and manipulation within this basic body of knowledge;

(MSOR3) apply core concepts in well-defined contexts, showing judgement in the selection and application of tools and techniques;

(MSOR4) understand logical arguments, identifying the assumptions and conclusions made;

(MSOR5) demonstrate a reasonable level of skill in comprehending problems, formulating them mathematically and obtaining solutions by appropriate methods;

(MSOR6) present straightforward arguments and conclusions reasonably accurate and clearly;

(MSOR7) demonstrate appropriate transferable skills and the ability to work under guidance.

General Business and Management (GBM)

A graduate who has reached the threshold level should be able to:

(GBM1) have knowledge and understanding of the key areas of business and management, the relationship between these, their application and their importance in an integrated framework;

(GBM2) have demonstrated competence within the range of area specific and intellectual skills;

(GBM3) have a view of business and management which is predominantly influenced by guided learning with a bounded critical perspective.

Framework for Higher Education Qualifications (FHEQ)

Bachelor's degrees with honours are awarded to students who have demonstrated:

(FHEQ v) the ability to manage their own learning and to make use of scholarly reviews and primary sources (e.g. refereed research articles and/or original materials appropriate to the discipline).

Council of Logistics Management (CLM) (2002)

Logistics is the part of the supply chain process that plans, implements, and controls the efficient, effective forward and reverse flows and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements.

14. Learning Outcomes

A. Knowledge and Understanding of:

1. the fundamentals of logistics and transportation (L&T), including the management of resources, operations, people and information, the relationship between these, their application and their importance in an integrated framework (supply chains) (MSOR1, CLM);

2. the key mathematical theories and algorithms, mathematical modelling, and computer support tools for L&T; their importance, application, and limitations (MSOR1, MSOR4, CLM);

3. the common applications of the theory and practice of L&T to the management of organisations, taking into account the external environment in which they operate (markets, customers, etc.) (GBM1, CLM);

4. the need for effective and efficient management of L&T processes and the benefits to be realised through proper application of the L&T methodology (CLM);

5. depending on the optional units chosen, contemporary and pervasive issues, including project management, business ethics, and aspects of finance (MSOR 7).

Learning and Teaching Strategies and Methods

Core knowledge is acquired mainly through lectures, group work and practical exercises. Lectures will include a limited number of well-chosen examples of real-life applications, mainly but not restricted to a L&T context (3 and 4), but will primarily focus on the fundamental concepts and the mathematical theories and algorithms

(1 and 2). Group work and practical exercises will be used to allow students to closely interact with the tutor and to gain skills in the application of the core knowledge to L&T (3 and 4).

Assessment

Testing of core knowledge and understanding is achieved through a range of assessment techniques, from traditional end of unit examination (to assess primarily learning outcomes 1 and 2) through in-class tests (1, 2), (individual or group-based) report on coursework (3, 4), and a project report (3, 4).

B. Cognitive (Intellectual or Thinking) Skills, able to:

1. demonstrate general skills in reasoning and numerical and symbolic thinking; demonstrate general abilities of an intellectual, analytical, critical, creative, and problem-solving nature;
2. demonstrate a reasonable level of skill in calculation and manipulation within the areas of L&T covered in the programme (MSOR2);
3. apply the L&T concepts learned in well-defined contexts for effective and efficient organization and management of logistics and transport processes, showing judgement in the selection and application of tools and techniques (MSOR3, GBM2);
4. collect information from a variety of sources, synthesise the results towards a given purpose, and communicate the findings in an appropriate format (FHEQ v);
5. demonstrate a reasonable level of skill in comprehending new L&T problems based on information that may be incomplete or contradictory, making judgements and framing appropriate assumptions, formulating the problems mathematically and obtaining (a range of) solutions by appropriate methods (MSOR5, GBM2);
6. develop a critical awareness of the benefits of the effects of L&T techniques and developments both for the individual firm and society (GBM1, GBM3);

Learning and Teaching Strategies and Methods

Core cognitive skills are acquired through a variety of teaching methods including exercises, class discussions, case studies (and videos) in combination with lectures. In particular, lab-based practical sessions will give students the opportunity to learn how to build mathematical models (1, 2), how these can be solved by mathematical tools (2), and develop their critical appreciation of the benefits (6). In addition, problem-based exercises will be used for students to learn how to transfer and apply core knowledge to other well-defined practical problems (3, 6). Cases and group work will give students the ability to address somewhat more loosely-defined problems in a simulated business context (4, 5, and 6). The project work will allow students to enhance their skills in analysis, synthesis, evaluation, and application of core knowledge to a (simulated or real-life) complex problem (4, 5, and 6). It also enables them to learn research methods and how to complete an important project, supervised and guided but self-managed (4).

Assessment

Testing of core cognitive skills is achieved through a range of assessment techniques, from traditional end of unit examination through in-class tests, (individual and group-based) coursework, and a project. Examinations and in-class tests are primarily used to assess learning outcomes 1, 2, 3, while coursework involving a written report and possibly an oral presentation will normally be used to assess learning outcomes 5, 6, and sometimes 4. The project will assess all learning outcomes but predominantly 4, 5 and 6.

C. Practical (Professional or Subject) Skills, able to:

1. formulate, apply, manage, and evaluate logistical concepts at a professional or equivalent level to manage (parts of) a supply chain or a transportation process, including the areas of production, warehousing, and distribution, in relation to given strategic objectives (of the firm);
2. identify problems of design, optimisation or operation in L&T practices; devise an appropriate solution methodology; identify and critically assess performance of suggested improvements (through e.g. SWOT-analysis);
3. use computer support tools for modelling and optimisation of L&T processes and problems, including tools for linear and integer programming, (discrete event) simulation, and (meta-) heuristics;
4. recognise and discuss the key principles of relevant management information & planning tools common within the L&T sector, including MRP/DRP/ERP systems, and vehicle routing and scheduling tools;
5. critically apply professional codes of conduct and appreciate the ethical (and legal) considerations that underpin them (GBM2)
6. plan, execute, and report on a significant project (MSOR6, FHEQ v).

Learning and Teaching Strategies and Methods

Professional and practical skills are acquired through lectures, presentations and/or company visits (1, 2, 4, and 5), group work, practical exercises, and the project. Tutor supported exercises, (group) work and case studies will be used to give students the ability to reflect upon the learned core knowledge and apply it to new problems in a simulated business context (1, 2, 5). The project work will allow students to tackle a complex problem (1, 2, 3, and 5). It also enables them to learn how to complete an important project, supervised and guided but self-managed (6).

Assessment

Testing of professional and practical skills is achieved in a variety of ways, including end of unit examination (1, 2, 4, 5), (individual and group based) coursework (2, 3) and a project (1, 2, 3, 5, 6).

D. Transferable (Graduate and Employability) Skills, able to:

1. communicate effectively in writing, speaking and in appropriate forms of presentation;
2. read and understand documents related to L&T software products and systems;
3. use information technology to handle data, simulation, and assist with design and testing;
4. apply mathematical techniques in business simulation and practice;
5. assess problem domains and formulate appropriate problem solving strategies;
6. build on previous experience in order to generalise;
7. work in teams to achieve goals but nevertheless be distinctively individual;
8. act autonomously, with minimal supervision or direction, within agreed guidelines.

Learning and Teaching Strategies and Methods

The emphasis is generally on building competence skills and confidence in their use coupled with the ability to select and apply appropriate skills.
These skills will be developed gradually and holistically through practice: class-room based activities (1), lab-sessions in which they learn how to work with specialist software (1, 2, 3, 4), group work (1, 4, 5, 6, 7), problem-solving exercises during tutorials (4, 5, 6), and the project (1, 4, 5, 6, 8).

Assessment

Outcomes are assessed in most units by work related assessment and also by the project.

15. Course Structure, Progression and Award Requirements

This is a (direct to final year) 1-year full-time programme with one annual intake starting in October. It normally consists of 20 credit point units, where 20 credits represent 200 hours of study time and usually includes 48 hours of time-tabled activities. The course offers a total of 120 credits for the award and includes four 20 credit compulsory units and a 40 credit project unit.
The mix of core and optional units of this programme offers a balanced trade-off between specialisation and generalisation, aimed at strengthening the personal profile and interests of the graduate and maximising his/her career opportunities as either managers, planners/practitioners, analysts or consultants within the sector of logistics and transportation.

The Logistics and Management Mathematics Group will organise a series of optional seminars where students will have contact with future employers and professionals in the field of logistics and transportation. In addition, some projects may lead to links with future employers.
The Department also offers an MSc in Logistics and Supply Chain Management for those students wishing to further their academic knowledge and skills in the logistics and supply chain field.

16. Employability Statement

This final year course has a clear focus on employment within the logistics and transportation sector. The Logistics and Management Mathematics Group seminars by academics and practitioners and chartered body representatives from the field of logistics assist students in understanding the opportunities available to them Students are encouraged to visit Purple Door to seek career information. Students are invited to talks in the department that might be of interest to then in terms of careers. Occasionally talks from Employers or about further study are specifically arranged.
Personal Development Planning is delivered through the personal tutor system based on centrally produced materials.

17. Support for Student Learning

- The Course is managed by a Course Leader.
- Extensive induction programme introduces the student to the University and their course.
- Each student has a personal tutor, responsible for pastoral support and guidance.
- University support services include careers, financial advice, housing, counselling etc.
- The Academic Skills Unit (ASK).
- The Additional Support and Disability Advice Centre (ASDAC).
- Excellent library facilities.
- The University of Portsmouth has consistently been awarded an excellent rating for student support and guidance in a number of Quality Assurance Agency inspections.
- Student course and unit handbooks provide information about the course structure and University regulations etc.
- Written feedback is provided for all assessments.
- Personal Development Planning (PDP) for all awards.
- Laboratory/Teaching facilities including access to specialised software.

18. Admissions Criteria

A. Academic Admissions Criteria

This is a (direct to final year) 1-year full-time programme with one annual intake starting in September. Students will be admitted who have an appropriate higher diploma or have successfully completed 2 years of appropriate degree study. For international students, general entry requirements for undergraduate (Degree) study apply, which includes an appropriate level of English (see the International Undergraduate Prospectus at www.port.ac.uk/international).

Students admitted by direct entry are regarded as being admitted with advanced standing. The award of credit necessary shall be made in accordance with University procedures (Section 25.1 of the Academic Regulations – AR1.10).

The programme should be of interest to students currently studying subjects at the equivalent of year 2 undergraduate level in any branch of engineering, business, economics, mathematics, or any degree with a quantitative element covering elementary levels of mathematics and statistics. Students may but are not required to have prior professional qualifications or experience.

B. Disability

The University makes no distinction in its admissions policy with regard to disability and will endeavour to make all reasonable adjustments in order to make it possible for students to study at Portsmouth on a course of their choice.

19. Evaluation and Enhancement of Standards and Quality in Learning and Teaching

A. Mechanisms for Review and Evaluation

- Course Leader's Annual Standards and Quality Evaluative Review.
- Head of Department's Annual Standards and Quality Evaluative Review.
- Unit and Course Level student feedback considered at Board of Studies.
- Unit Assessment Board consideration of student performance for each programme.
- Annual Standards and Quality Reports to Board of Studies, including consideration of Subject and Award External Examiner Reports.
- Periodic Programme Review.
- Student Representatives and Student/Staff Consultative Committees.
- National Student Survey.
- Staff Performance and Development Review.
- Peer Review and Development Framework.
- Faculty Learning and Teaching Committee.

B. Responsibilities for Monitoring and Evaluation

- Unit Co-ordinators for unit content and delivery.
- Course Leader for day-to-day running of course.
- Deputy Course Leader for day-to-day running of Combined Honours route.
- Board of Studies with overall responsibilities for operation and content of course.
- Head of Department.
- Associate Dean (Academic).
- Associate Dean (Students).
- Quality Assurance Committee.
- Unit, Award and Progression Board of Examiners.

C. Mechanisms for Gaining Student Feedback

- Student Representation on Board of Studies.
- Student Staff Consultative Committees.
- Unit and Course level student feedback questionnaires.
- University participates in external student surveys, e.g. National Student Survey (NSS), Postgraduate Research Experience Survey (PRES) and International Student Barometer (ISB).

D. Staff Development Priorities

- Academic staff undertake activities related to research, scholarship, teaching and learning and student support and guidance.
- Annual staff performance and development reviews match development to needs.
- Managers undertake a variety of management development programmes.
- All academic staff expected to work towards Fellowship of the Higher Education Academy.
- Support Staff are encouraged to attend short courses in areas such as minute taking, and specific IT packages.

20. Assessment Strategy

The student has a choice of options at level three and the assessment regimes in both core and option are selected in accordance with the nature of the units. This typically provides a mix of formal examinations, in-class tests and coursework. The final year project provides an opportunity for the development of research and presentation skills and is assessed primarily by the project report.

21. Assessment Regulations

Standard university rules apply (see Assessment and Regulations).

22. Role of Externals

Subject External Examiners who will:

- oversee unit assessment and usually attend Unit Assessment Boards;
- approve unit assessment strategy;
- sample assessment artefacts;
- present their report to Unit Assessment Boards.

Award External Examiners (usually also a Subject External Examiner) who will:

- oversee and attend Award/Progression Boards;
- scrutinise and endorse the outcomes of assessment;
- ensure that the standard of the award is maintained at a level comparable with that of similar awards elsewhere in the United Kingdom.

23. Indicators of Standards and Quality

A. Professional Accreditation/Recognition

Accredited by the Chartered Institute for Logistics and Transportation (CILT)

B. Periodic Programme Review (or equivalent)

The course was included in the Periodic Programme review in February 2014. Curriculum and annual monitoring processes were approved.

C. Quality Assurance Agency

QAA Higher Education Review, March 2015, judgements about standards and quality meet UK expectations (*for full report see Higher Education Review of the University of Portsmouth, March 2015*[1]).

D. Others

The University of Portsmouth submitted a new unit to the REF2014 Panel 10 Mathematical Sciences, comprising work from two main research clusters: **Nonlinear and Complex Systems**, and **Logistics and Operational Research**. The work spanned the spectrum from theoretical advances in these subjects, through to applications addressing specific challenges in collaboration with academic and industrial partners. Eleven staff were submitted by the University of Portsmouth. The submission included two impact case studies illustrating our impact on healthcare logistics and the management of financial risk.

- 9.8% of our research outputs were rated world-leading (4*) and 61% either world-leading (4*) or internationally excellent (3*)
- 80% of our impact was rated as having very considerable reach and significance (3*)
- Out of 53 institutions across the UK submitting in this Unit we were ranked 24th for impact at world-leading (4*) and internationally excellent (3*) level, and ranked joint 1st among post-1992 universities
- 62% of our submission overall was rated as world-leading or internationally excellent
- Among post-1992 universities, we were ranked 2nd for overall performance

24. Other Sources of Information

Other sources of information may be found in

- Course Approval Document.
- Student Handbook.

[1] www.qaa.ac.uk/en/ReviewsAndReports/Documents/University%20of%20Portsmouth/University-of-Portsmouth-HER-15.pdf

- University of Portsmouth Curricula Framework.
- University of Portsmouth Undergraduate Prospectus.
- Assessment Regulations.
- University of Portsmouth (http://www.port.ac.uk/) and (www.port.ac.uk/departments/academic/maths) website(s).