B901-BRD Master of Science in Brewing and Distilling with Entrepreneurship

PROGRAMME DETAILS
Programme Code: B901-BRD
Department: Bioscience
Main Award: MSC - Master of Science
Full Award Title: Master of Science in Brewing and Distilling with Entrepreneurship
Level: Postgraduate Taught

LOCATION OF STUDY
Edinburgh Y Scottish Borders N Orkney N
Dubai N Malaysia N Approved Learning Partner N
Independent Distance Learners N Collaborative Learning Partner N Other N

ASSOCIATED AWARDS
Programme Code | Award | Title
--- | --- | ---
B901-BRD | MSC | Master of Science in Brewing and Distilling with Entrepreneurship
B940-ZZZ | PGCERT | Postgraduate Certificate in Brewing and Distilling
B945-BRD | PGDIP | Postgraduate Diploma in Brewing and Distilling

ACCREDITATION
N/A

LEARNING OUTCOMES – SUBJECT MASTERY
Understanding, Knowledge and Cognitive Skills

The Programme aims to enable learners to:

- Develop detailed knowledge and understanding of the fundamental subjects and topics which are essential in gaining the broad spectrum of expertise required for malting, brewing and distilling: cereal science and technology, yeast science, microbiology, biochemistry, process technology, business strategies, management, food safety, practical and project skills (malting, brewing and distilling), quality control and quality assurance, flavour assessment, analytical chemistry.
- Develop a sound understanding and knowledge of policy, legislation, ethical, health and safety issues of concern as they relate to the design, manufacture, marketing and sale of alcoholic drinks and for the raw materials, processing aids, by-products and wastes of the industry.
- Develop specialist knowledge of the malting, brewing, fermentation, processing, distillation, maturation, packaging and distribution process stages in the production of alcoholic drinks.
- Develop knowledge and understanding of the methods and research skills for investigating new and existing problem areas in malting, brewing and distilling, so that the ability is acquired to conduct independent research and to solve problems.
- Develop knowledge and understanding of the business environment pertaining to malting, brewery and distillery companies including the main areas of strategic planning, operations management, organisational structure, human resources management, marketing, finance, intellectual property and due diligence.
- Critically analyse and evaluate subject material and concepts.
- Develop understanding and appreciation of enterprise, creativity, entrepreneurship and commercial awareness in brewing and distilling sectors.
- Develop entrepreneurial skills in business and commercial planning and the creation of commercial value in brewing and distilling sectors.

Scholarship, Enquiry and Research (Research Informed Learning)
The Programme aims to enable learners to:-

- Comprehend, analyse and critically evaluate theory, research findings, process applications.
- Diagnose attributes and defects in alcoholic drinks.
- Recognise, evaluate and comment on alternative theories, opinions and points of view.
- Explore alternative theories and hypotheses.
- Understand and use data and information effectively.
- Apply and interpret statistical and numerical information.
- Develop skills in creative thinking, analysis of industrial and commercial environments.
- Develop skills in analysis of business and commercial feasibility for entrepreneurial venturing and value creation.

LEARNING OUTCOMES – PERSONAL ABILITIES

Industrial, Commercial and Professional Practice

- Carry out a detailed literature survey and be competent and expert at collecting, organising and presenting information from www, library, journals, books.
- Make critical judgement and evaluations.
- Understand the process operations of malting, brewing and distilling, including the planning of recipes, quantities, process parameters.
- The programme has very close links with industry, networking during industrial visits and following talks by visiting lecturers is a key component of the course.
- Develop core skills such as initiative and creativity.
- Demonstrate ability to develop business skills and apply them to a project.

Autonomy, Accountability and Working With Others

- Take responsibility for their learning and become more independent as learners.
- Work effectively alone and as part of a team.
- Develop skills in sourcing resources for commercial applications.

Communication, Numeracy & Information and Communications Technology

- Manage data and information efficiently and effectively.
- Use a range of techniques for work presentation: written, word processed, spreadsheets, presentation packages.
- Develop business, market and financial skills.

APPROACHES TO TEACHING AND LEARNING

A wide range of approaches are used for teaching and learning, these include lectures, tutorials, laboratories and assignments such as essays, problems, case studies, projects and presentations. Examinations provide an opportunity for students to demonstrate that they have grasped a wide range of key concepts and can articulate them clearly.
EDUCATIONAL AIMS OF THE PROGRAMME

The Programme aims to enable learners to:-

- Develop their knowledge, understanding and subject-skills related to the science and technology of malting, brewing and distilling, and, on graduation, to have the breadth and depth of knowledge in the subjects required by the industry.
- Develop knowledge and understanding of business and management.
- Broaden their perspective from a possibly narrow first degree to the breadth of knowledge in many and varied disciplines as required in order to be in a position to fully understand and participate in malting, brewing and distilling – such as: research, production, sales, marketing, technical sales.
- Learn the underlying principles, relevant defining concepts, theories and methods, the current state of knowledge and future development possibilities.
- Grasp the global, regional and local contexts of malting, brewing and distilling. Understand the structure of the malting, brewing and distilling industries and to be aware of the political, legal, ethical, health and safety issues in producing, selling and marketing alcoholic drinks.
- Understand the implications that some alcoholic drinks are defined as "food".
- Enable students to develop their personal abilities, such as team working, communication, time management, prioritisation, job seeking, interview techniques, new century creation.

ASSESSMENT POLICIES

Understanding, knowledge and subject-specific skills will be evaluated by course work (assignments as essays, problems, case studies, projects and presentations) as well as written examinations.

The MSc project will be assessed by submission of a written thesis, which will include an element of enterprise/entrepreneurship.

PROGRAMME STRUCTURE

Mandatory Courses

<table>
<thead>
<tr>
<th>Edinburgh</th>
<th>SBC</th>
<th>Orkney</th>
<th>Dubai</th>
<th>HWUM</th>
<th>IDL</th>
<th>Coll. Partner</th>
<th>ALP</th>
<th>Other</th>
<th>Stage</th>
<th>Semester</th>
<th>Phase</th>
<th>Course Code</th>
<th>Course Title</th>
<th>SCQF Cr</th>
<th>SCQF Lvl</th>
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<td></td>
<td>B91CE</td>
<td>Cereals, Malting and Mashing</td>
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<td>B91WF</td>
<td>Wort Boiling and Fermentation</td>
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<td>H11EN</td>
<td>Entrepreneurship &amp; Creativity</td>
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<td>B81EZ</td>
<td>Critical Analysis and Research Preparation</td>
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<td>B91DW</td>
<td>Distilling and Whisky Maturation</td>
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<td>Filtration and Packaging</td>
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<td>B91RS</td>
<td>MSc Research Project</td>
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### Optional Courses

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<tr>
<th>Edinburgh</th>
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<th>Dubai</th>
<th>HVUUM</th>
<th>IDL</th>
<th>Coll. Partner</th>
<th>ALP</th>
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<th>Stage</th>
<th>Semester</th>
<th>Course Code</th>
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<th>SCQF Cr</th>
<th>SCQF Lvl</th>
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<td>Foundations of Energy</td>
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<td>B99BM</td>
<td>Beverage Microbiology and Biochemistry</td>
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<td>B99TG</td>
<td>Introduction to Process Technology</td>
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### COMPOSITION NOTES (PG)

8 taught courses (7 mandatory and 1 optional) plus a dissertation

- Mandatory Credits: 115
- Optional Credits: 15
- Elective Credits: 
- Dissertation Credits: 60
- Total: 190

### AWARDS, CREDITS AND CRITERIA (PG)

#### Awards, Credits and Levels

<table>
<thead>
<tr>
<th>Awards</th>
<th>Overall Credits</th>
<th>Specific Requirements</th>
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<tbody>
<tr>
<td>Masters Degree</td>
<td>180</td>
<td>180 SCQF credits including a minimum of 150 credit at Level 11</td>
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<tr>
<td>Postgraduate Diploma</td>
<td>120</td>
<td>120 SCQF credits including a minimum of 90 credit at Level 11</td>
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<tr>
<td>Postgraduate Certificate</td>
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<td>60 SCQF credits including a minimum of 40 credit at Level 11</td>
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#### Award Requirements

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<th>Master (Distinction)</th>
<th>Total Course Passes</th>
<th>Overall Mark</th>
<th>Overall Grade</th>
<th>Basis of Overall Mark/Grade</th>
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<tbody>
<tr>
<td></td>
<td>8+Dissertation</td>
<td>70</td>
<td>A</td>
<td>Credit Weighted Average greater than or equal 70% over 8 courses at grades A-C plus a Dissertation at grade A.</td>
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<td>Master</td>
<td>8+Dissertation</td>
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<td>Diploma (Distinction)</td>
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<td>Credit Weighted Average greater than or equal 70% over 8 courses at grades A-C</td>
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<td>Diploma</td>
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<td>Credit Weighted Average greater than or equal 40% over 8 courses at grades A-E</td>
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<td>Certificate</td>
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<td>40</td>
<td>D</td>
<td>Credit Weighted Average greater than or equal 40% over 4 courses at grades A-E</td>
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### DURATION OF STUDY

<table>
<thead>
<tr>
<th>IN MONTHS</th>
<th>Full-time</th>
<th>Part-time</th>
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<tbody>
<tr>
<td>Masters</td>
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<tr>
<td>Diploma</td>
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<tr>
<td>Certificate</td>
<td>6</td>
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### RE-ASSESSMENT (PG)
1. A student who has been awarded a Grade E or F in a course may be re-assessed in that course. A student who has been
awarded a Grade D in a course may be re-assessed in that course in order to proceed to or be eligible to receive the award of
Masters.
2. A student shall be permitted only one re-assessment opportunity in a maximum of three taught courses. The opportunity for
re-assessment in four or more taught courses shall be at the discretion of the Progression Board.
3. Any further re-assessment opportunities in a course will require the approval of the Postgraduate Studies Committee.
4. A student may be permitted, at the discretion of the Progression Board, to be re-assessed in the dissertation, project or other
supervised research component of the course of study.

PROGRESSION TO DISSERTATION/PROJECT
In accordance with University Regulations, to progress to Masters level a minimum of Grade C is required