Revision of the IBD Master Brewer Qualification

Background
Over the past year, a major revision of the syllabus and examination format of the IBD Master Brewer qualification has been carried out by a project team led by Dr Harry White (a past president of the IBD) and consisting of members of the M. Brew. exam group of the IBD Board of Examiners, plus representatives of IBD - approved training organizations.

The IBD Master Brewer is a professional qualification that is much respected world-wide and is unique in that it is designed to test technical and managerial competence at a senior level (albeit, by written examination) and truly requires several years practical brewing experience.

However, it is now some 15 years since the current syllabus was established and, although still appropriate to many aspects of brewing operations, it has been indicated by many senior members of the industry to the IBD that there was a need to revitalize this qualification, in order to ensure its complete relevance to the requirements of modern brewery management.

This revitalization was the main brief for the project team, but with the understanding that any new format would, in no way, compromise the essential Master Brewer feature of its value as an assessment of technical competence, and that any re-design would maintain or, indeed enhance, its academic status and strive for true equivalence to a university Masters degree. At the same time, it was felt that there was a need to increase the emphasis on assessment of key management principles, equivalent with the requirements of a Diploma in Management Studies.

The revision process is now complete and the proposals for the re-structured Master Brewer qualification are summarized in this report. The new syllabus is in the final stages of development and will be published in full by end of July 2009. It should be noted here that all features of the revised syllabus and examination format have been approved by the full Board of Examiners and have been endorsed by the IBD Council.

The essential features of the revised M. Brew. include:

- Replacement of Module 5 (Case Study) by a Practical Project.
- Total review of the syllabus content of Module 4, to provide greater emphasise on general management principles.
- Re-formatting of syllabus contents of all Modules 1 to 4, including removal of the “Competence Log”.
- Re-structuring of the Examination format.
- Increased emphasis on the need for mentoring, with the introduction of an IBD approved Mentors scheme.
**New Module 5**

It was decided early on in the revision process that the modular nature of the examination process should be maintained, but that a complete re-thinking of the value of module 5 (case study) was required. The original concept when the modular structure was first introduced 15 years ago, was that the case study paper would represent the opportunity for candidates to “pull together” all the features learnt in studying for modules 1 to 4, in so far as, no candidate would be allowed to sit module 5 until all other modules had been passed. This policy was changed a few years later, so that module 5 become just another paper, albeit requiring a wide knowledge and experience base in order to achieve success. However, in more recent years, the true value of this module has become more and more questioned, with the developing concern that maybe this examination format had “run its course” and required re-assessment.

A key feature of the new M. Brew. structure is that Module 5 will no longer be examined as a case study paper, but will be a Practical Project that candidates can carry out at their place of work or at an academic institution if they so wish. The concept of including a practical project to be assessed by the IBD BoE is especially useful in enhancing the premise that the M. Brew. does indeed represent a practical assessment of application of technical knowledge, as well as providing the candidates and their companies with the opportunity of carrying out a potentially valuable investigation or achieving a practical process or product development.

It is anticipated that most (if not all, as is the current situation) M. Brew. candidates will not register for all modules in one year, so that a requirement will be that candidates can only submit a Module 5 Project after having registered for at least one other M. Brew. module.

**Module 5 Project**

The details of the proposed Module 5 Project are as follows:

1. **General features of the Project**

   The Project must be an original piece of work and will be assessed by the BoE against the following criteria:
   - relevance to brief, quality of discussion, appropriate use of references, extent of analysis and evaluation, comment and originality.

   The Project should demonstrate the candidates’ own experiences, ideas, judgment, and investigations to the production of a comprehensive and useful document which is relevant to their organization and to their own personal development.

   Every opportunity should be taken to demonstrate the candidate’s information gathering and presentation skills, as well as abilities to interpret and evaluate information critically and creatively.

   The title and subject matter for the Project will be decided by the Candidate and must comply with the criteria set by the IBD Board of Examiners.

   The Project must be approved by the IBD Board of Examiners before work starts.
The Project dissertation should have a word count of 8,000 – 10,000 words, using Microsoft Word in English.

2. Project scope and subject
The project may encompass any areas within the scope of the Master Brewer Syllabus, as long as it demonstrates the candidate’s overall competence as a well-rounded potential senior manager in the Brewing Industry.

The subject matter can be of any technical topic relevant to their brewery or organization.

It should be well structured and cover both technical and managerial aspects.

*Some subject ideas:*
- Process/plant optimization
- Capacity increase proposals including detailed investment justification.
- Quality/Troubleshooting investigation.
- New product or process introduction.
- New plant proposal or commissioning.
- Efficiency investigation such as beer losses or line operation.
- An environmental compliance task

3. Project Sponsor
The candidate must obtain a Sponsor for the Project from within his/her organization.

The role of the Sponsor is to:
- Support the candidate with resources and opportunities to carry out the project within their organization.
- To agree the topic of the Project with the candidate, bearing in mind the scope set by the IBD, with his/her Mentor.
- Confirm that the Project is the candidate’s own original work.

4. Project Mentor
The candidate must have an appointed Mentor whose responsibility will be to:
- Endorse the candidate’s original Project proposal to the IBD.
- Be a source of advice and guidance should the candidate seek and require it throughout the Project.
- Endorse the candidate’s Project submission prior to assessment by the Board of Examiners.

*Note: ideally, the Sponsor and Mentor should not be the same person, but this will not be a requirement*.

5. Project pass criteria
The Project will be assessed by the examiners and supported by the Moderator where appropriate.

There will be three categories of assessment:
1) Fail = <50 marks/100;
2) Pass = 50 – 69 marks/100,
3) Distinction = >69 marks/100.
6. **Confidentiality**  
The content of the Project and name of the candidate will remain confidential (as for all other modules).  
The candidate must be aware of their company’s policy on confidentiality and check this with their sponsor.

7. **Declaration – candidate’s own work**  
Candidates will have to declare formally that the Project is their own work, but it is recognized that it may be part of an overall project, in which case the support and assistance of others should be included in a list of ‘Acknowledgements’.

If verification or validity of the project being the candidate’s own work is required, the BOE reserve the right to communicate with all involved (sponsor, mentor, candidate) and may require a ‘viva’ follow up.

8. **Late Submissions**  
Projects submitted after the stated deadline for that year, will not be accepted for assessment.

9. **Proposed Timetable**

   **Year 1**
   End August: Candidates to obtain a Sponsor and Mentor for their project. If an internal Mentor is not available then the candidate should apply to the IBD for an appointed IBD Mentor.  
   End September: Candidates register for Module 5 (Project must be Sponsor and Mentor supported) and submit a Project Proposal for approval by IBD Board of Examiners.  
   End October: Project ‘approved’ by Board of Examiners and work can commence.

   **Year 2**
   End May: Project completed and submitted to Mentor and Sponsor for approval.  
   Mid June: Project to be submitted to the BOE at Clarges Street for assessment. The submission is to be formally supported by the candidates Mentor and/or Sponsor.  
   August: Results of Project assessment published with rest of exam results.

10. **General Notes**
The last Module 5 Case Study examination will take place in June 2010.

The first Assignment cycle will start in August 2009 for assessment in June 2010.

Candidates obtaining a ‘Fail’ assessment will not be allowed to ‘resubmit’ their Project, but will need to carry out another Project at a later date.
Module 4
In order to achieve the desired increased emphasis on assessment of key management principles, it has been agreed to alter the theme of the content of Module 4 from “Central Functions” to “Operations Management” and the new title is “Resource Management and Regulatory Compliance”
The new syllabus elements are designed to be equivalent with the requirements of a Diploma in Management Studies and the content for this module is now re-structured in 6 units, as follows:

- **Unit 4.1 – Environment (includes: sustainability and climate change, energy and water conservation, waste minimisation).**
- **Unit 4.2 – Health and Safety (includes: regulatory requirements, management, hazard identification & risk assessment, accident investigation).**
- **Unit 4.3 – Quality Assurance (includes: food safety, quality systems)**
- **Unit 4.4 – Financial Management (includes: revenue budgeting, management accounting, project management).**
- **Unit 4.5 – Supply Chain (includes: capacity planning, manufacturing scheduling, inventory control, procurement, logistics).**
- **Unit 4.6 – Resource Planning (includes: maintenance, human resources, world class manufacturing, information technology).**

Modules 1-3
Modules 1, 2 and 3 have been re-formatted. There has been little change to individual syllabus content for each of these modules, but with increased emphasis on management principles and re-structuring to produce a common format (like module 4 using a “3 tier” approach).

- **Module 1 – continues to be called “Materials and Wort Production”**
  Content to include 6 Units:
  1.1 – Raw Material – Malted Barley
  1.2 – Raw Material – Adjuncts
  1.3 – Raw Material – Hops
  1.4 – Raw Material – Water
  1.5 – Brewhouse Operations (includes: materials and composition of wort, selection, design and layout of plant, wort production, control of hygiene, quality assurance procedures)
  1.6 – Management (includes general management, utilities usage, control of costs).

- **Module 2 – continues to be called “Beer Processing”**
  Content to include 5 Units:
  2.1 – Yeast Husbandry (includes: yeast management, propagation)
  2.2 – Fermentation Operations (includes: design of product & process specifications, selection, design and layout of plant, technical management of fermentation, control of hygiene, quality assurance procedures).
  2.3 – Maturation & Conditioning Operations (includes: design of product & process specifications, selection, design and layout of plant, technical management of maturation, control of hygiene, quality assurance procedures).
2.4 – Filtration, Clarification & Bright Beer Storage (includes: design of product & process specifications, selection, design and layout of plant, technical management of filtration, control of hygiene, quality assurance procedures).

2.5 – Management (includes general management, utilities usage, control of costs).

- **Module 3** – to be re-titled: **Packaging of Beer**

  Content to include 5 Units:

  3.1 – Bottling Line Operations (includes: design of product & process specifications, selection, design and layout of plant, technical management of bottling, control of hygiene, quality assurance procedures).

  3.2 – Canning Line Operations (includes: design of product & process specifications, selection, design and layout of plant, technical management of canning, control of hygiene, quality assurance procedures).

  3.3 – Large Pack Filling Operations (Keg or Cask) (includes: design of product & process specifications, selection, design and layout of plant, technical management of kegging/ cask racking, control of hygiene, quality assurance procedures, dispense systems and procedures).

  3.4 – Supply Chain Procedures (includes: supplier management, traceability, internal control)

  3.5 – Management (includes general management, utilities usage, control of costs).

---

**Revised Examination Format**

For modules 1-4, the examination will consist of two written exams:

- **Short Answer Paper**: “short answers” and “multiple choice”, in order to ensure as complete a coverage of the syllabus as possible; to be 2 hours and worth 100 marks.

- **Long Answer (Essay) Paper**: choice of 4 from 6 for 2 hours; to be worth 25 marks each.

- Each module to be sat on separate days; short answer paper in the morning, “essay” paper in the afternoon.

- Also the pass mark for each of modules 1 - 4 will be increased to 50% (from current 45%).

Finally, the IBD Board of Examiners will still recommend that a minimum of 3 years (and ideally 5 years) practical experience of brewery management, in as many different operational functions as possible, is a basic requirement for all potential M. Brew. candidates.
Mentors
The IBD BoE strongly advises all M. Brew. candidates to secure the services of a mentor to guide their progress through the syllabus and the examination system; this becomes especially important with the planned introduction of the revised module 5 as a practical project.
A Mentor can either be someone in the candidate’s organization, (and must be a Senior Manager and member of the IBD) or someone appointed by the IBD.

The BoE have proposed that the IBD should appoint Accredited Mentors (like the IBD Trainer Accreditation system), who will likely be derived from a group of experienced qualified members from the different sections of the IBD.

Communication between candidates and Mentors will depend on location and circumstances, and could include visits, telephone conversations and e-mails.

Summary
The objective of the revision project for the Master Brewer was to ensure that the IBD’s most prestigious qualification continues to represent one of the highest accolades recognized by the global brewing community.
The inclusion of a practical project (as module 5) can only serve to enhance the position of the M. Brew. as the premier assessment of technical brewing competence, with the very real status of compatibility with a university Masters qualification, but still requiring several years’ practical brewing experience.
Also, with the increased emphasis on key managerial principles designed to be totally relevant to brewery management, the modified M. Brew. can be regarded as equivalent to many comparable Diplomas in Management Studies.
The net outcome of this revision is to place the IBD Master Brewer qualification, in reality, as a Master of Brewing Operations, to which all potential senior brewery managers would undoubtedly wish to aspire.

Timetable
The new detailed syllabus will be published in July 2009, with the plan to start the first Assignment cycle (for Module 5 Projects) in August 2009 for assessment in June 2010. However, current candidates can still opt to take the existing Module 5 - Case Study paper for one more year; the last Module 5 Case Study examination will take place in June 2010.

The new syllabus for Modules 1 to 4 will apply from this year, for examination in June 2010, but the IBD BoE will also run the existing syllabus in parallel for examination in June 2010 for those candidates who choose to continue with the current syllabus.

There will be a complete change to the new syllabus with effect for examinations in June 2011.

Further details are available from the IBD Examinations Department or on the IBD website.

Dr David G. Taylor, Chairman IBD Board of Examiners  (21st May, 2009)