
# Specialist Portfolio
# Guidance for Candidates, Training Officers and External Examiners

# CONTENTS



It is very important that candidates, trainers and external examiners read the information contained in this document thoroughly and have a good understanding of what is required.

# INTRODUCTION

The Institute of Biomedical Science (IBMS) Specialist Portfolio provides the opportunity for recognition of structured, standardised post-registration training and assessment of early career biomedical scientists. Individuals can evidence their development of specialist knowledge and skills in their chosen field by gaining the Institute's Specialist Diploma. The portfolio can be used as evidence to help biomedical scientists seeking career advancement or identifying education and training needs if returning to work/working in new disciplines, or by employers when considering eligibility for promotion. It can also be used by Higher Education Institutions for assessing work-based learning and accredited learning for postgraduate qualifications.

Applicants must, as a minimum requirement, be in the IBMS membership class of Licentiate and be working in a laboratory with Institute approval for post-registration training. Applicants must retain their membership of the IBMS throughout their study of the Specialist Portfolio.

The portfolio is not available to Associate members of the Institute or individuals undertaking pre-registration training. The Specialist Diploma confers eligibility to apply to upgrade Institute membership from the class of Licentiate to Member.

Single discipline specialist portfolios will be available in the following disciplines:

- Andrology
- Blood Transfusion Practice
- Cellular Pathology
- Cervical Cytology
- Clinical Biochemistry
- Clinical Immunology
- Diagnostic Cytopathology
- Haematology with Hospital Transfusion Practice
- Histocompatibility and Immunogenetics
- Medical Microbiology
- Genomics and Molecular Pathology
- Virology

Multi-discipline specialist portfolios will be available in the following disciplines:

Blood Sciences

Infectious Sciences

Cell Sciences

Rapid On-site Evaluation (ROSE) is available as a post specialist diploma and can be applied for through the ROSE application form.

Individuals undertaking single discipline portfolios will be able to select modules as additional optional modules from Genomics and Molecular Pathology and Andrology Specialist Portfolios.

The Specialist Portfolio modules are made available on a Learning Management System (LMS) on submission of a completed application form to the Institute with the required payment, which is inclusive of the end-point assessment. Applications must be submitted by the training officer/manager, not the candidate.

Application forms should include as training officers, all those individuals who require access to the candidate's portfolios. If a training officer is an IBMS member their membership number must be included in the application.

The IBMS's Specialist Training Portfolio must be completed in accordance with the IBMS's instructions. Following completion of the portfolio and successful examination of the knowledge, the candidate will be eligible for the award of a discipline specific or multi-discipline Specialist Diploma.

A discipline specific portfolio reflects the range of analyses that are considered to be relevant to a specialty. All non-optional modules must be completed in order to express the ability of the biomedical scientist to operate at the specialist level. Completion of the modules should follow the formal training programme that is submitted to the IBMS as part of the laboratory approval process.

It is accepted that some of these tests may not be performed in the candidate's own laboratory. Whilst practical skills (for example through secondment to another laboratory) may not be achievable to the level of someone performing them regularly, knowledge and understanding of its application is still required and may be examined. There may also be other tests the training laboratory includes within its basic repertoire in which the individual is additionally required to be competent. These can be assessed and then recorded in the reflective practice statement at the end of each sub-section.

A signed statement must be provided with the portfolio by the laboratory manager, which indicates the laboratory's repertoire and analyses that a specialist practitioner working in that laboratory would be expected to perform competently and without supervision.
To reflect the changing landscape of pathology services, provision is made for individuals who have, or wish to develop, a wider scope of practice. The multi-discipline Specialist Portfolios in Blood Sciences, Cell Sciences and Infection Sciences allows the selection of modules from the single discipline portfolios in these fields. Choices should be based on candidates practice as all selected modules should be performed by the candidate. Module choice will also be influenced by co-requisite modules meaning selection of certain modules will necessitate undertaking other specified modules.

Optional modules exist for the following single-discipline portfolios:
Cellular Pathology
Diagnostic Cytopathology
Genomics and Molecular Pathology

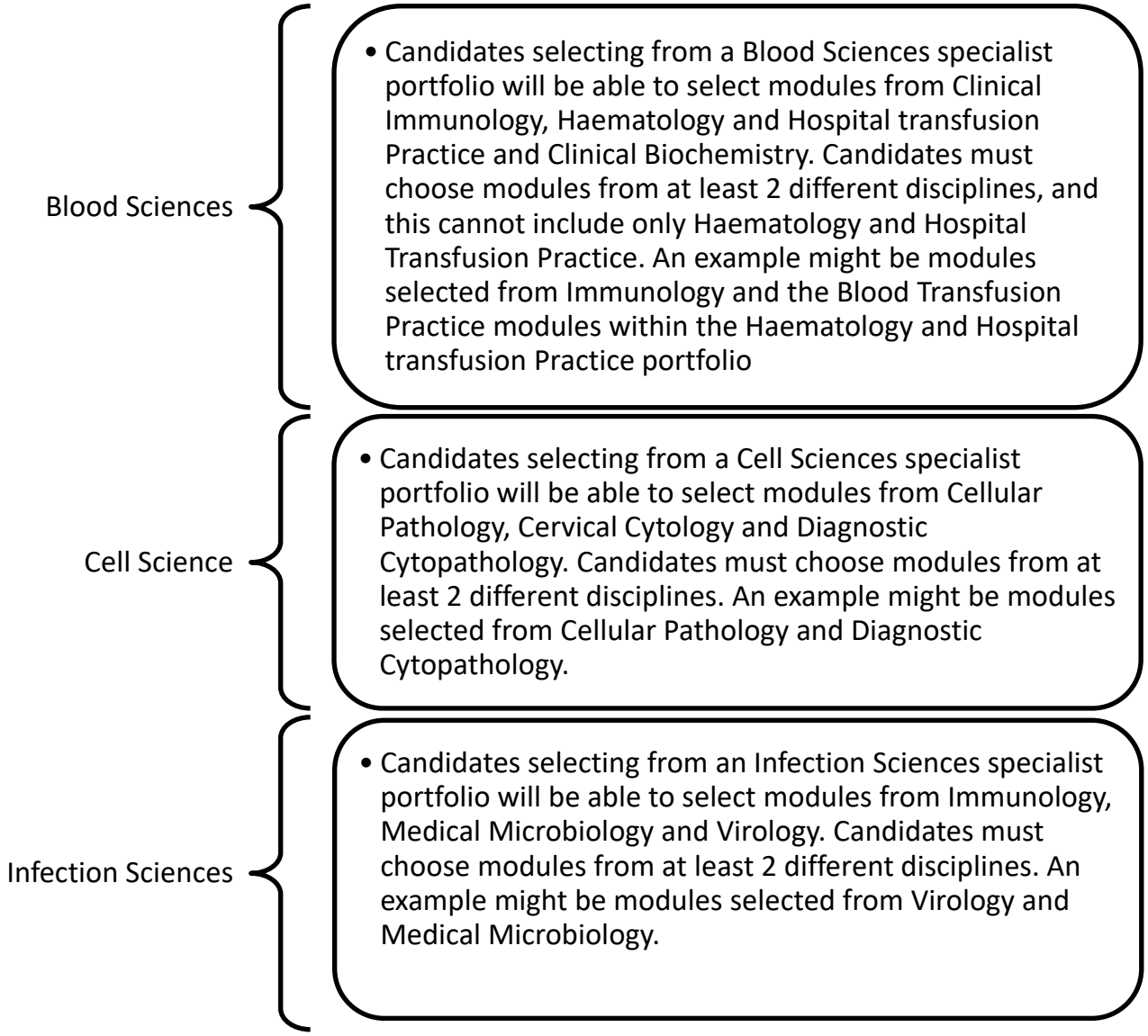
**In order to select optional modules, the laboratory must be able to practically demonstrate these modules.**

The module booklets outline the requirements for each single-discipline portfolio. Every candidate completing a specialist portfolio must complete the quality module, the learning outcomes for which are in its' own booklet.

Each single discipline portfolio consists of modules and each module has the same structure:

| | |
|---|---|
| **Aims:** | This outlines the purpose of the module and what the candidates will learn. |
| **Learning Outcomes:** | Each module consists of between 7-10 learning outcomes. These learning outcomes are what is required to be met by the evidence submitted. Indicative Content – Indicative content provides additional context to the learning outcomes by outlining areas that candidates are expected to know and can be assessed on in the viva. These are not required to be met in the evidence out with what is met through the learning outcomes. |
| **Indicative Content:** | Indicative content gives context to knowledge required to meet the LOs as well as knowledge and competences expected across modules and can form part of the examination during the viva |

**Multi-discipline Portfolios**




The combinations and minimum module numbers required can be seen in the multi-discipline portfolios and are references in the resource section on page
Module selection must be made with the training officer as the lab will require training approval for modules selected and the candidates will need to be able to practically complete all modules selected.
Candidates may find they have more modules than they selected due to the corequisite modules. Corequisites for each module within the multi-discipline portfolios can be seen on the IBMS website and are referenced in the resources section on p 33.

On successful examination candidates will receive a transcript of their modules alongside their Specialist Diploma certificate.

Candidates with a multi-discipline Specialist Diploma who wish to undertake a single discipline portfolio will only need to evidence the modules not completed during the multi-discipline portfolio, although the full single discipline portfolio content will be assessed during the viva.

## PURPOSE OF THE PORTFOLIO

Completion of the Specialist Portfolio expresses the ability of the biomedical scientist to operate at the specialist level in a particular discipline(s). This is defined in the following learning outcomes below which have been subdivided into three areas.

### Knowledge and understanding

The successful candidate will be able to:

- Demonstrate knowledge and understanding of complex scientific and technical aspects of their specialist discipline including: correct procedures for handling specimens before, during and after analysis; maintenance of routine equipment; principles of in- house data management systems and quality control/assurance procedures.
- Demonstrate knowledge and understanding of the scientific basis of the laboratory tests and the disease process under investigation.
- Show an awareness of current issues and developments within healthcare and biomedical science.
- These are evidenced by in-house assessments of training and competence, and examination of knowledge during the viva voce with the external examiner to assess the ability of the candidate to describe/discuss these aspects of their work.

### Professional skills

The successful candidate will be able to:

- Competently perform a range of laboratory tests without immediate supervision.
- Demonstrate independent self-direction in problem solving, decision making and exercising personal autonomy in relation to scope of practice.
- Demonstrate a systematic application of professional knowledge and understanding in the interpretation of laboratory data to determine action based on best practice.
- These are evidenced by the in-house assessments of training and competence and portfolio of evidence.

**Transferable skills**

The successful candidate will be able to:

- Demonstrate communication skills within the healthcare environment and as part of the laboratory team. This is evidenced by the presentation and portfolio evidence.
- Demonstrate the ability to critically reflect to inform best practice. This is evidenced by portfolio evidence and personal reflective statements.

## UNDERSTANDING THE PORTFOLIO

During completion of the portfolio, biomedical scientists will be gathering evidence of Continuing Professional Development (CPD) and competence to practice through the post-registration training they undertake, and experience they gain in practice. This meets the fundamental requirements of continuing registration with the HCPC, i.e. compliance with the following areas:

- Professional autonomy and accountability
- Professional relationships
- Identification and assessment of health and social care needs
- Formulation and delivery of plans and strategies for meeting health and social care needs
- Critical evaluation of the impact of, or response to, the registrant's actions
- Knowledge, understanding and skills

Each of the modules within the discipline specific portfolio requires the candidate to demonstrate knowledge and competence elements of their practice at a postgraduate level in their specialty.

**Internal assessments**
It is the responsibility of the trainer(s) to ensure that the learning outcomes described on p7-8 are met through elements described below. Evidence is generated through the internal assessment of training, knowledge, application of knowledge in practice and competence that will be externally assessed as part of examining the candidate's suitability for the award of an IBMS Specialist Diploma. Once completed the elements of the module must be signed off by the trainer. The candidates competence will be signed off in each module on the reflective documents provided and signed by the training officer or individual who assessed the individuals laboratory competence.

**Questions set by trainer**
The learning outcomes in each module do not constitute questions, the training officer must set questions that will demonstrate the candidates knowledge, understanding and application of the stated learning outcomes, these should reflect the candidates experiences. Each module requires the assessment of the application of knowledge and understanding primarily through the answering of questions set by the trainer on the stated subject areas indicated by the aims at the beginning of each module as well as the learning outcomes. The portfolio is not prescriptive about the type of assessment, which may be done via an oral tutorial, written questions or other suitable task as long as the evidence is provided. (Please note: Essays are NOT a suitable form of assessment).

Please note: Where the word 'Demonstrate' is used in the learning outcomes there must be appropriate evidence from the candidates practice to meet this learning outcome, this can be demonstrated in the questions or the additional evidence as selected by the candidate.

**Evidence selected by candidate**
Although evidence of training and assessment may be generated as part of good laboratory practice only ONE example of evidence selected by the candidate must be submitted for each module. This can be chosen by the candidate as an example of evidence that demonstrates their knowledge and

competence in performing a particular technique, decision making or troubleshooting. The choice of evidence is justified in the Reflective Practice Statement.

Evidence must be sufficient to enable a considered judgement by the external examiner on whether the standards in terms of knowledge and skills for the module have been met. Evidence should not be excessive, examiners have 60 minutes to review the portfolio of evidence and should be able to determine if the candidates evidence meets the requirements within this time-frame.

Other examples of evidence that may be acquired during the course of training can, if the candidate wishes, be filed in their CPD records for reference purposes and

**Reflective Practice Statement**
The ethos of undertaking reflective practice should be the recognition that it is a naturally occurring characteristic of those wishing to develop. How the candidate completes this section is personal to their circumstances but it should be approached by recognising the responsibility for demonstrating self-awareness when analysing gaps in their knowledge. This is therefore, an opportunity to reflect on aspects of training, the application of new knowledge and skills, and how goals have been achieved. It is also expected that the candidate will explain why they included the evidence chosen by themselves.

**Completion Time**
The length of time to complete the Specialist Portfolio is likely to vary and will be dependent on additional modules selected but it is typically expected to take around 24 months. Whilst there is currently no time limit for completion of the portfolio there is a requirement for evidence to be current, i.e. within three years of the external examination. Evidence older than three years should not be included unless, in exceptional circumstances, its relevance to candidate's current practice can be confirmed by the trainer.

Please note: If a new version of the portfolio is introduced this will trigger an expiry limit of three years on any superseded version of a portfolio, commencing from the date a new version is introduced.

**Re-employment in another Laboratory**
The portfolio is considered the property of the individual as it represents a commitment by the employer for professional development specific to them. It is not 'owned' by the laboratory. If the candidate is re-employed in another laboratory the partially completed portfolio is retained by the candidate, it is however at the discretion of the new employer whether or not they wish to continue with the same portfolio or restart the process. If they opt to continue with the existing portfolio the new employer is responsible for reviewing the evidence and competence of the candidate in line with requirements of their new scope of practice.
**Please note:** laboratories must have appropriate IBMS training approval in place to support candidates through the specialist portfolios.

**Link to Higher Degrees**

Whilst the award of a higher degree (MSc) is not a prerequisite for the award of a Specialist Diploma there is the opportunity to integrate the two at the discretion of the university. For example, in-service training undertaken to complete this portfolio could be recognised by higher education institutions under the category of work- based learning and accrue academic credit towards a qualification. Equally, some of the formal education and assessments undertaken as part of an MSc degree may support in-house laboratory training for completion of the portfolio, although MSc assignments (e.g. essays) are not considered appropriate for the portfolio

## CRITERIA FOR USE OF THE PORTFOLIO

Only the Institute's Specialist Portfolio learning platform can be used for the purpose of recording the training of a biomedical scientist for the Institute's award of a Specialist Diploma.

The IBMS Specialist Portfolio is issued to the candidate with a unique case number and cannot be transferred to another individual. This case number should be quoted in any communication regarding this portfolio.

Specialist Portfolio training must take place in a laboratory approved for training at the post-registration level by the Institute and for the appropriate discipline(s).

The Specialist Portfolio will only be issued to a named Institute member upon completion of the application form in conjunction with the Departmental Training Officer, Training Manager or Manager.

The portfolio requires evidence that indicates that the candidate has applied knowledge, comprehension and analytical skills gained at undergraduate level to the (new) situation in which they work as a registered biomedical scientist.

The portfolio evidence submitted will contain a completed and signed record of laboratory training in the designated speciality. There are three key components:

The aims of each module are represented by Learning Outcomes that relate to an area of laboratory investigation or practice.

Each module has a scope of practice and Reflective Practice Statement to be completed and submitted. The candidate must complete the Reflective Practice Statement to demonstrate that they can relate knowledge from several areas, draw conclusions and reflect on their own performance as an independent professional learner. At the end of the reflection the training officer is required to complete the section indicating that the candidate is trained in this module and works in accordance with laboratory procedures.

The laboratory training officer must sign and date all evidence submitted including the Reflective Practice Statement.

When the candidate is deemed ready for external examination by the Training Officer and Manager, the candidate should be given the Scope of Practice signed by the laboratory manager which indicates the laboratory's repertoire and analyses that a specialist practitioner working in that laboratory would be expected to perform competently and without supervision, and the Record of Training Reviews to submit in the Final Submission Module. Submission of these documents states that the laboratory is confident that the candidate is ready for examination.

For non-optional modules e.g. single discipline portfolios, where some techniques are not performed in the laboratory the candidate is still expected to be able to demonstrate knowledge and understanding, if not the practical competence. All optional modules are required to be demonstrated practically in the candidates laboratory/rotation.

If a new version of the portfolio is introduced this will trigger an expiry limit of three years on any superseded version of a portfolio. Candidates will therefore be expected to submit an application for examination within three years from the date a new version is introduced.

When new versions of a portfolio are introduced this will be communicated in the Biomedical Scientist, on the IBMS website, on social media and through the specialist portfolio platform in use. It is the responsibility of the training officer and candidate to ensure the application for examination is submitted within the required timeframe. Extensions will only be considered if there are mitigating circumstances that prevented completion of training.

If an individual changes employment whilst completing the Specialist Portfolio and is able to transfer to another approved laboratory their portfolio is transferrable. However the laboratory which applies for the external examination is responsible for ensuring the candidate has completed all the modules and evidence requirements. The laboratory may therefore, wish to re-assess the individual's competence and/or require certain pieces of evidence to be re-submitted. In these circumstances any relevant sections of the portfolio already completed in the previous laboratory must be countersigned by the responsible trainer in the new laboratory

## LABORATORY BASED TRAINING

The IBMS Specialist Portfolio can only be completed in laboratories which hold IBMS approval for post-registration training specific to the portfolio being undertaken. In-service training and assessment must demonstrate good scientific practice, based on the learning outcomes in the stated modules, to meet the requirements of the external examination process.

Information on how to achieve IBMS laboratory training approval can be found in the training guidance documentation available on the Institute website. Approval is granted on the basis of the laboratory demonstrating they meet the IBMS standards for post-registration training and there are sufficient resources in place to support the candidates training for the duration of the training programme (submitted as part of the training approval documentation).

Approval for training is dependent on the laboratory being able to demonstrate how ALL sections of the portfolio are completed in accordance with the following:

In-service training and assessment must demonstrate the candidate has achieved the required depth and breadth of knowledge specified in all of the modules in the portfolio, in order to meet the requirements of the external examination process.

Where tests may not be performed in the candidate's own laboratory it is accepted that practical competence to the level of someone performing them regularly may be difficult to achieve, even through secondment. Whilst practical skills may not be achievable, knowledge and understanding of its application is still required and may be examined.

Each candidate completing the Specialist Portfolio must have an indicative training programme which sets out the sections of the laboratory they will rotate through, the expected duration in each area, the sections that are covered and how training is assessed.

Several trainers may be involved in training but training should be co-ordinated and carried out under the control of a designated training co-ordinator or training officer.

Candidates are considered to be registered on a Specialist Portfolio from the date of issue.

The length of time to complete the Specialist Portfolio may vary but it is typically expected to take around 24 months. Whilst there is currently no time limit for completion of the portfolio, there is a requirement for evidence to be current i.e. within three years of the external examination. Evidence older than three years should not be included unless, in exceptional circumstances, its relevance to the candidate's current practice can be confirmed by the trainer.

There should be regular (typically monthly) review sessions between the candidate and an allocated trainer/mentor. These should be recorded and submitted as part of the portfolio examination. The aims of these sessions are to:

- Set training targets in line with the training programme
- Review previous work and evidence
- Highlight any issues or concerns
- Ensure the portfolio is on target for completion

Knowledge and competence sections/ learning outcomes in the portfolio must be completed for all modules within the chosen discipline(s). Candidates must demonstrate practical skills for all tests that are included in the signed scope of practice statement provided by the laboratory manager.
If some techniques are not performed in the laboratory the candidate is expected to be able to demonstrate knowledge and understanding (but not the practical skill) that would be applied in the practical situation. This only applies to non-optional modules, all optional modules must be demonstrated practically.

Short periods of secondment to other Institute approved laboratories may supplement training in order for the individual to gain additional practical skills and experience.

Candidates and trainers may undertake a selection of the following activities to complete training and assess the application of knowledge and skills, i.e. the assessment of competence.

Work-based training with direct observation of practical skills (DOPS)
Case based discussion to demonstrate knowledge of 'output' of work
Self-directed reading to broaden knowledge
Tutorials and scientific discussion to explore extent of knowledge
Reflective practice to self-assess knowledge and skills
Question and answer sessions with trainer to test knowledge

To note: essays are NOT acceptable evidence for the external examiner to review.

Suggested types of evidence:

Annotated photomicrographs
Annotated copies of quality control graphs
Tutorial notes for question-and-answer sessions
Feedback from PowerPoint presentations by the candidate
Annotated result print outs
Reflective statements
Photographs
Special projects
Method comparisons
Annotated EQA report

Assessment logs (must clearly indicate level of knowledge and skill achieved)
Tables/grids
Case studies
Poster
Flow diagrams
Annotated presentation notes for attended talks
Attendance certificates-with reflective statements
Referenced diagrams
Audits
Risk assessments
IBMS CPD practices
Annotated NICE guidelines annotated
Discussion transcript/summary
Scientific meeting minutes and reflective statements
Annotated journal articles and reflective statement

Evidence from all of the examples above is not required. The ONLY evidence required for the external assessment process is based on direct observation of skills and questions set by the trainer to assess working knowledge and the selected piece of work related to the knowledge and competency statements or learning outcomes from each module as indicated within the portfolio modules.

During a training programme many pieces of paper will be generated. The candidate will need to select which pieces are suitable as evidence for the Specialist Portfolio module. The training officer should check these are appropriate and meet the requirements of the standards for external examination.
All evidences must be of an appropriate level.

## CONSTRUCTING THE PORTFOLIO OF EVIDENCE

**Evidence Requirements**

Evidence must be sufficiently relevant to enable a considered judgement by the external examiner on whether the standard for the module has been met or not met.

This judgement is made with respect to the candidate's ability to answer questions set by the trainer on the knowledge and skill components required to complete this module, and the candidate's ability to demonstrate their competence and application of knowledge in the areas associated with the module.

All work must be signed and dated by the candidate and the trainer.
This demonstrates ownership of the work by the candidate and that it has also been reviewed and assessed by the trainer. It is expected that there is evidence of this with constructive feedback. The use of feedback is very important and improvement should be seen throughout the portfolio in response to the feedback given. An example of good evidence would be where a candidate undertakes a task, receives constructive feedback, responds to this and progress can be seen.

A plagiarism statement to confirm the portfolio is the candidate's own work.

Any evidence of plagiarism will result in failure of the portfolio and the candidate will be required to complete a new Specialist Training Portfolio. It is therefore important that the candidates understand what plagiarism is and how to avoid it, there are many resources on this topic and a useful IBMS support hub, Plagiarism Demystified https://www.ibms.org/resources/webinars/ibms-support-hubs/

Any evidence that includes work that is not the candidates own, e.g. diagram or results, needs to be annotated. It should be clear where material has come from, what is the candidates own work and what may have come from others.
Highlighting and underlining alone is insufficient- it must be obvious why it has been offered up as evidence
Lack of annotation or demonstration of candidates own knowledge and understanding will result in that piece of evidence being discounted

Each piece of evidence should be clearly linked to the relevant module.

Where cross-referencing is used in V4 this should be clear and obvious to the examiner how this meets the knowledge and competence statements. For the digital V5 portfolios cross-referencing is not accepted.

**Evidence of Achievement**
"Candidate has been assessed by trainer to work in accordance with standard laboratory procedures".

No portfolio evidence is required for this section as a signature is sufficient.
Training officers can link this with in-house laboratory competence training and records and examiners may request to see an example.

This section must be signed by an appropriate competent member of staff who is responsible for confirming the candidate's ability and may not necessarily be the training officer.

V4 portfolio "Candidate has answered questions set by trainer on the knowledge and skill components required to complete this module".
V5 portfolio Candidates evidence must demonstrate the learning outcomes.

This ensures the laboratory has comprehensively assessed the candidate's knowledge against the standard. Remember this is at specialist level and therefore higher than registration. Questions should be linked to the learning outcomes in p7-8 of this document and focus on specific aspects of the test or procedure that the candidate can be expected to have working knowledge of, i.e. without relying on the SoP or other reference documents.

V4 This section must be signed by an appropriate competent member of staff who may not necessarily be the training officer.V5, each evidence must be signed by the training officer or appropriately competent member of staff.

There are a variety of ways of conducting and evidencing this assessment:

Written short questions and answers

- This requires evidence that an appropriate competent person has marked the work and provided feedback to ensure it is of a specialist standard
- This is an opportunity to demonstrate the progression of the candidate's training by showing responses to feedback
- The candidate needs to be able to communicate what they have learned

Verbal questions and answers

- This could be evidenced by a detailed witness statement by the person who tested the candidate's knowledge and the areas covered
- A set of questions with expected answers could be prepared with them being ticked off as the candidate answers them (evidence of interaction/discussion required)
- This method would be good preparation for the laboratory tour, which examines their working knowledge at specialist level

Multiple choice questions (MCQs)

- Can be delivered as a 'homework' assignment or as a test
- Can be used for multiple candidates although beware of 'sharing' between
- multiple candidates

"One other piece of evidence chosen by the candidate as an example of their fitness to practice…"

This piece of evidence is selected by the candidate. It should demonstrate the application of specialist level knowledge and skill. This is an opportunity to choose something that the candidate finds interesting, for example:

- Case Study
- Annotated set of results
- Reflection on a training session
- Reflection on errors made during training
- Annotated morphology images
- Evaluative content (advantages and disadvantages) of techniques

This piece of evidence must relate to the standard and the candidate needs to justify its selection in the module reflection. This piece of evidence is not required to cover the whole of the standard.

## END-POINT ASSESSMENT PROCESS

**Version 4** - On completion of training and in accordance with the requirements of the Specialist Diploma, the candidate's employer (laboratory manager or training officer) should apply to the Institute for the appointment of a visiting external examiner.

Accompanying the application should be a signed statement from the laboratory manager testifying to the range of laboratory investigations undertaken by the candidate. This will be used by the external examiner to guide the areas for questioning during the laboratory tour.

**Version 5** – Upon completion of the training and portfolio of evidence in accordance with the requirements of the Specialist Diploma the manager should provide a signed statement testifying to the range of laboratory investigations undertaken by the candidate. This will be used by the external examiner to guide the areas for questioning during the laboratory tour. This should then be submitted in the final submission module alongside the plagiarism statement and record of training review. This will signal that the candidate is ready for examination.

The appointed external examiner will be instructed by the Institute to contact the laboratory to arrange a mutually acceptable date and time for the assessment visit. Documentation guiding the assessment visit will be sent by the Institute to both the examiner and the training officer/manager.

The aims of the end-point examination procedure are to:
Independently verify that competence has been met (portfolio of evidence) and assess the standard of the candidate for suitability for the award of a Specialist Diploma (through review of the evidence, presentation and viva voce examination during the laboratory tour)
Ensure consistency between disciplines and between laboratories
Check that professional body guidelines and criteria are applied nationally
Reassure the employer that their training is to the appropriate standard
Disseminate areas of good practice where appropriate
Provide constructive feedback on areas of unsatisfactory practice
Make a recommendation regarding the assessment of the candidate (Pass/Fail) to the Institute
Make recommendations regarding the ongoing training approval status of the laboratory

**Role of the external examiner appointed by the Institute**
The external examiner for Specialist Portfolios can only be appointed by the IBMS. This individual reviews the Specialist Portfolio evidence and documentation to check all modules have been signed off and to verify appropriate training has been undertaken through review of the portfolio of evidence. The external examiner will assess the candidate's knowledge and understanding of their specialty through their oral presentation and examine their knowledge during the laboratory tour to determine their suitability for the award of the Specialist Diploma.

It is not the role of the external examiner to assess the practical competence of the candidate. This is the responsibility of the trainer, the evidence of which is exemplified in the portfolio.

The external examiner's role is to verify this has taken place (by checking the portfolio for evidence of training and assessment of competence) and also assess the ability of the candidate to demonstrate an understanding of the scientific basis for tests, quality control, quality assurance, quality management, governance, health and safety and use of equipment commensurate with the learning outcomes in the portfolio. As a representative of the Institute the external examiner will also make an assessment on whether or not the laboratory is complying with IBMS standards for approval of the laboratory for post-registration training.

**External Examination Visit**

The candidate needs to be able to demonstrate knowledge related to the modules in the portfolio and have an in-depth working knowledge of everything within their scope of practice. Candidates are therefore advised to practice both the presentation and the laboratory tour before the external examination: knowing something and being able to communicate it clearly and concisely is a skill which comes with practice.

As an external representative of the Institute, the examiner must adhere to the Institute's guidelines and represent the Institute's standards. Whilst promoting good practice it is important to resist any temptation to impose personal standards and opinions on the training laboratory.

The following procedure enables the Institute to award a Specialist Diploma to individuals who meet the criteria and also to confirm ongoing approval of "Training Laboratory" status.

**Stage 1: Presentation (Indicative time 15-20 mins)**

The presentation is to ensure that the candidate can demonstrate an understanding of their scope of practice and role in the laboratory.

The presentation should usually be in PowerPoint format. If projection facilities are not available it can be viewed on a computer screen. It is expected that the 15-20 minute presentation will contain the following elements:

An indication of the candidate's scope of practice and how it has developed since registration based on the reflective practice elements of the portfolio;
Current developments in the laboratory or recent trends;
Special interests or professional activities of the individual.

Presentations need not be overcomplicated, should be structured to reflect the areas in which experience has been gained and act as a prompt for the dialogue, which supports the work done in the Specialist Portfolio.

The candidate's presentation skills are not being tested therefore presentation notes are acceptable but not encouraged, candidates should be able to communicate the presentation effectively.

The external assessor may wish to ask some questions related to the presentation or seek points of clarification.

**Stage 2: Portfolio assessment (indicative time 90 mins)**
External examiners should aim to review the portfolio evidence within 90 minutes, which is sufficient to review the quantity of evidence expected for each specialist portfolio. More evidence than this is deemed as excessive although examiners should not use this as a sole reason to fail the candidate. External examiners may request specific evidence deemed excessive to be revised by the candidate.

Evidence for the portfolio is prescribed in the EVIDENCE OF ACHIEVEMENT section and on the online learning environment and this is the ONLY evidence that is required. Evidence should be clearly titled and for V4, in the same order as the Specialist Portfolio modules.

The V4 portfolio Evidence of Achievement section and V5 portfolio online learning environment have three standard requirements:

Observed by trainer to carry out a specific function/investigation (signature as evidence). This does not require a separate witness statement

Answered questions set by trainer (single piece of evidence to demonstrate this);
"Questions asked by the trainer" are informed by the knowledge component and competence requirements or learning outcomes of each module and should be linked to the learning outcomes in pages 7 and 8 of this document. Evidence should support the fact that candidates understand their role and are competent to perform the work, either through questions they have been asked, set (and marked) questions or notes from tutorials. Evidence must be dated and signed by the candidate/training officer as appropriate.

Single piece of evidence chosen by the candidate (not the trainer) to reflect an aspect of the training.
The second piece of evidence is selected by the candidate and chosen to demonstrate an aspect of the training and competency assessment. This choice is briefly justified in the reflective practice statement (e.g. as my third piece of evidence I chose to annotate a laboratory printout of results from a test I performed because…).

The reflective practice statements are intended to demonstrate that the candidate has developed in the application of their practice and can apply what they have learned in the context of the module. The external examiner will review these statements which should be supported by the evidence contained in the portfolio. This may lead to further discussion on the laboratory tour.

**Stage 3: Laboratory tour with viva voce (maximum 60 mins)**
The tour should not exceed 60 minutes which is considered to be sufficient time to examine the candidate's knowledge, even in a large department. Specimen reception should not be included in the tour; this will have been covered in the IBMS Registration Portfolio.

Examiners should proactively question the candidate according to the standards below. These are the standards outlined on the examiners report form.

Remember this is specialist level. Candidates are expected to be able to answer questions on the following:

- correct procedures for handling specimens, pre- and post-analysis
- application of health and safety requirements
- principles of laboratory investigations
- practical aspects of particular tests
- significance of abnormal results, possible causes and further testing indicated
- correct operation and maintenance of equipment
- principles of quality control and quality assurance

When examination vivas are completed online the candidates tour presentation should not contain informative text beyond the title of what is being looked at and candidates cannot use notes, this should be enforced by the internal trainers.

Although the laboratory manager's statement will highlight the candidate's scope of practice it is reasonable to ask questions on any aspect covered in the portfolio. A theoretical knowledge is required as a minimum on tests performed outside of the department.

The candidate should be able to respond to questions asked by the external examiner based on the knowledge components/learning outcomes of the portfolio and their scope of practice. In doing so they demonstrate (in conjunction with their presentation and portfolio of evidence) that they meet the learning outcomes detailed in the introductory section of the portfolio.

Questions may include references to equipment in use including, microscopic observations on slides that might be available in the laboratory or printout of results.

If the candidate is involved in training it is reasonable to expect them to explain how they do this. They should be able to explain NEQAS results as part of their knowledge of quality assurance, and demonstrate that they know how to apply health and safety.
The external examiner is required to record examples of questions in their report.

**Stage 4: Approval of laboratory for specialist training**
The Institute has published guidance and criteria for approval of laboratories for support staff, pre- and post-registration training. Based on these criteria the laboratory tour also gives the external examiner an opportunity to satisfy themselves that the laboratory has the appropriate requirements for post-

registration training against the checklist on the examination form. This is provided as separate documentation and is available on the Institute's website.

**Stage 5: Feedback comments to trainer and candidates.**
The external examiner may wish to have an initial meeting with the training officer alone in order to raise and address any issues or concerns which may have been identified during the examination.

When meeting with the candidate, the outcome (Pass or Fail) must be communicated to the candidate prior to any feedback being provided.

If the candidate has passed, feedback will be provided at the time and written up on the examiners report.

If the candidate fails, the examiner will provide detailed feedback as to the issues and guidance on how to address them. This will be recorded in the examiner's report. A timeline will be agreed by the candidate, training officer and examiner to address any shortcomings. A subsequent full or partial examination will be required and this must be arranged through the IBMS.

The external examiner should also decide whether they consider that the laboratory continues to meet IBMS laboratory approval standards for post- registration training and recommend in their report either that they pass or fail to meet the required standards.

If the laboratory fails, the examiner will provide full details in the examiner's report. The IBMS will then follow up with the laboratory and provide support and guidance to address the issues identified.

Please note it is possible for the candidate to pass and the laboratory to fail (and vice versa).

Feedback should be concise, constructive and based on the Institute's guidance in relation to Specialist Portfolio training and completion. Personal opinions or advice may be offered in the context of examples of good practice, but it should be clear they are personal and NOT a specific requirement of the Institute.

Some laboratories may wish to seek further guidance from the examiner with regards to advice about evidence and completing the portfolio. This is at the discretion of the examiner and should be taken outside of the normal examination process. It should also be noted that some of this advice may be based on the personal knowledge and experience of the examiner and may therefore vary between examiners.

**Appeals**
Unsuccessful candidates will have the opportunity to appeal on procedural matters related to the examination process. Appeals must be made by the training officer or manager and submitted with the laboratory feedback form within one week of the examination. Appeals must clearly state the reasons for the appeal with supporting evidence where appropriate. Appeals will be considered by an appeals panel of the external examiner and two HCPC registered members of the IBMS Council who are not associated with any aspect of the application.

**Stage 6: Completion of reports**

Both the external examiner and the laboratory trainer are required to submit reports to the Institute. This provides an opportunity to share the feedback, and reflect on any issues that may have arisen. Receipt of these documents is necessary for the issue of the Specialist Diploma certificate.

Specialist Diploma examination report – to be completed by the examiner and sent to the IBMS within one week of the examination. (A copy may be made available to the training officer).

The Institute requires a full, detailed report of the examination. The report should include (in brief) a summary of the topics covered in the laboratory tour, range of evidence included in the portfolio, areas which were weak (but sufficient) which could be expanded on, and areas in which the candidate performed well.
Reports which merely confirm the standards were met (through use of the check boxes) will be returned to the examiner for further comment.

Laboratory feedback form – to be completed by the training officer and sent to the IBMS within one week of the examination. This form is to provide them with the opportunity to communicate their, and the candidate's, experience of the examination process. Completion of this form is a mandatory requirement for continued approval of the laboratory for training. It enables the Institute to audit all aspects of the examination process and to maintain consistency and parity of the examination process on a national level. It is designed to be constructive. Failure to submit the report will delay the award of the Specialist Diploma.

The IBMS may follow up feedback on the basis of the report and feedback form as appropriate.

## QUALITY ASSURANCE

**Overview**

The Institute's Council through its Education Department and Education & Professional Standards Committee is responsible for initiating and managing the review of its standards, guides, policies and processes pertaining to Institute awards and examinations.

The Chief Executive, President, other Council members and discipline specific experts inform operational and strategic implications of developments arising from Institute stakeholder groups that may impact on curriculum or professional practice.

Responsibility for the quality of awards provided by the Institute lies with the Executive Head of Education and senior education team but monitoring of this takes place at several other points:
Executive Head of Education and the education team undertake the day-to-day responsibility for programme provision
All external examiner and laboratory feedback reports are reviewed by the education team. Adverse comments or observations that are reported specifically for the attention of the Institute are reviewed by the senior education staff and follow-up action initiated
Incident reports are made to the Education and Professional Standards Committee which considers overall issues affecting the quality of the programme

**Specific processes related to Specialist Portfolios are:**

Specialist advisory panels add their voice and perspective to the process of review and continued improvement of the programmes
Specialist examiner training is reviewed and updated in response to changes in the portfolio content and assessment process

Professional development opportunities for those involved in various aspects of the programme include:
IBMS Specialist Examiner training days
Annual Council and Advisory Panel update and development meetings
IBMS training conferences and the biennial Congress
Local presentations

## FREQUENTLY ASKED QUESTIONS

Q1. **I am not a member of the Institute. Can I complete the specialist portfolio?**

No. A candidate must have current corporate membership of the Institute of Biomedical Science for the duration of the 'study' period. Corporate classes are Licentiate, Member, or Fellow. Associate members are not eligible.

Q2. **Why do I need to complete the Specialist Portfolio?**

There are three good reasons for this:

Holding a Specialist Diploma demonstrates that you have been assessed against a benchmark standard for a specialist practitioner in your chosen discipline
it can be used by your employer to demonstrate specialist knowledge and skills linked to career and pay progression
it gives you eligibility to apply for upgrading your class of Institute membership from Licentiate to Member

It is very different from the registration portfolio required for HCPC registration which is used to evidence that an individual has met a broad threshold standard of fitness to practise which is profession-specific, rather than based solely on a single discipline.

Q3. **Who should pay the fee for the Specialist Portfolio?**

This is a local decision. Both the employer and individual benefit from the opportunity provided by the professional body to facilitate, evidence, and formally recognise the acquisition of specialist skills and knowledge. The charge is a nominal one-off amount towards providing this service to Institute members

Q4. **How long will it take for a date to be set for my assessment?**

This is dependent on the availability of an external examiner. External examiners volunteer to undertake examinations and allocation depends on factors including examiner availability, geographical location and discipline specialism. It could be up to two months from receipt of your application form.

## Portfolio Organisation and Evidence

Q5. **What evidence do I need?**

The type of evidence is indicated by the Evidence of Achievement section/module information, and this is the ONLY evidence required. It must of course be relevant to the knowledge and competence statements or learning outcomes for the module.

Q6**. Can I use evidence from a laboratory I worked in before I started my Specialist Portfolio?**
I used to work in a reference lab and have copies of published papers with my name on which cover techniques in the Specialist Portfolio but not done in my current laboratory. Obviously my trainer couldn't sign to say they'd witnessed my practical skills, but would that be ok to cover the principles?

The requirements for the evidence of achievement sections are clearly stated and should be relevant to the laboratory in which you are being trained and assessed. (Published papers could be placed in your professional portfolio). The trainer is responsible for assessing your knowledge and competence before signing off your portfolio.

Q7. **Who signs?**

V4 - The Evidence of Achievement section requires the trainer's name and signature, and therefore should be signed by the person who assesses competence at the end of the relevant training for the module. Underneath is an area in which to confirm the section has been completed and the evidence assessed and checked internally (e.g. by the training officer). In some instances this will be the same person.

Q8. **Is the person who signs the person who actually trained you in that technique, or must it be the training officer?**
**Is it okay for a Band 5 to sign (if they did the training) or does it have to be a more senior person? I have a very "reluctant" training officer!**

Someone in the laboratory who has assessed your competence should provide the signature for the portfolio. As long as they are competent to train and assess you at a specialist level, the grade of staff should not be an issue. However, the training officer (or someone senior) should take responsibility for assessing the evidence is appropriate for each section and sign the section underneath the Evidence of Achievement section (V4).

Q9. **How do I complete the reflective practice statements at the end of each module?**

The aim of this part of the portfolio is to encourage you to think about your experience and how you can apply your skills in other areas. Try to capture what the laboratory does in relation to the topic, what you have learned, and how you apply this in the context of patient diagnosis. Future learning is identified by

how you wish to build on this experience. It is very much an expression of your personal experience and an awareness of your practice.

Q10. **Are there any courses available to support completion of the Specialist Portfolio?**

No specific courses are run by the IBMS, although you may wish to contact your local IBMS branch or university to see if anything is available or can be arranged. Some universities have developed MSc courses with work-based modules linked to the specialist portfolio. The version 5 portfolios have a resource section maintained by the specialist advisory panels.

Q11. **Do I need to complete my training in one laboratory?**

No. There is no requirement to complete in one laboratory and in some cases it may be desirable to have a secondment to another laboratory for some modules. However, each laboratory must be approved by the Institute for training.

Q12. **I have been working as a trainee biomedical scientist, then as a Band 5 for almost two years in a specialist laboratory (four years in total), but only applied for my Specialist Diploma after changing my job and starting an MSc.**
**Should the date of my specialist training be when I became registered with the Health and Care Professions Council (HCPC) or when I received my portfolio?**

It is normal for a newly registered biomedical scientist to commence a period of specialist training in order to consolidate and extend their skills and knowledge in their specialist discipline. Therefore, you may have accumulated evidence suitable for your portfolio in advance of receiving it. However, there is a requirement for evidence to be current i.e. within three years of the external examination. Evidence older than three years should not be included unless, in exceptional circumstances, currency can be confirmed by the trainer.

Q13. **Can I use anything I sent for assessment for my MSc, as I completed this while HCPC- registered for the past two years?**

It may support the acquisition of knowledge for your training but evidence should be specific to your training and assessment in the laboratory.

Q14. **Do I need to complete all sections of the portfolio?**

Yes. However, not all sections require evidence of practical completion. Where the learning outcome states 'Demonstrate' evidence must include work from the candidates own practice. Similarly, some skills may be transferable such that, together with knowledge, competence in some techniques may be considered to be achievable, even if the laboratory does not perform the method routinely.
Where tests may not be performed in the candidate's own laboratory it is accepted that practical competence to the level of someone performing them regularly may be difficult to achieve, even

through secondment. Whilst practical skills may not be achievable knowledge and understanding of its application is still required and may be examined.

Q15. **How long does training take?**

Although training can be expected to take up to two years after registration, it may be possible to complete the portfolio in less time if an individual has previous relevant experience to build upon for their specialist training (e.g. experienced gained in a single discipline while on a 12-month university placement).

Q16. **As a training officer I have just received a specialist portfolio for a member of staff. How best should I proceed?**

There can be no substitute for careful reading of the Guidance to Candidates, Trainers and External Examiners, relevant articles in The Biomedical Scientist and the Education and Careers/Specialist Portfolios section of the IBMS website. You may also wish to contact training officers in other departments to share ideas and good practice so that you fully understand what is required. The crux of the qualification is the ability of the individual to articulate knowledge relevant to their specialist practice (e.g. training junior staff).

Q17. **The portfolio says: "Answered questions set by the trainer". What questions do I set?**

Questions must relate to the knowledge and competence sections and are informed by your own professional 'working' knowledge of the principles and application of the techniques. The level of knowledge should reflect that required of a specialist practitioner (see Purpose of the Portfolio). Questions may be verbal during a tutorial session (if so, keep a record of them), written short questions and answers or multiple-choice exercises. The format is at the discretion of the individual trainer and will depend on local circumstances.

## Specialist Practitioner Status

Q18. **Do I need the Specialist Diploma to advance my career?**

Although the Institute's qualifications are not mandatory for professional advancement, they do provide a recognisable method by which the employer can measure someone's ability to practise post-registration at a specialist level in a particular discipline or disciplines.

| Q19. **When can I work out-of-hours?** |
| --- |
| When your employer (and yourself) believes you are competent. The requirements for out-of-hours working are defined by the employer and depend on the scope of practice required to perform the out-of-hours laboratory service competently to the required standard. As with the Registration Portfolio, the Specialist Diploma may link to some, but not necessarily all, of the service requirements. |

| Q20. **I am changing disciplines. Do I need to undertake a second Specialist Portfolio?** |
| --- |
| Not necessarily. There is no requirement to complete a second Specialist Portfolio; however, there is a requirement under HCPC regulation to be competent in one's scope of practice, and the Specialist Portfolio is one way you can gain this competence and evidence it. |

| Q21. **If I do a multi-discipline portfolio do I have to repeat modules if I want to do a single-discipline portfolio?** |
| --- |
| No. Candidates who complete a multi-discipline portfolio and then wish to complete a single-discipline portfolio can do this by evidencing the learning outcomes for modules not selected in the multi-discipline portfolio. Candidates will be assessed during the viva on all the modules within the single discipline. |

| Q25. **I work in a multi-discipline department. Which modules should I select if I do a multi-discipline portfolio?** |
| --- |
| Your laboratory manager/ training officer and yourself must select the modules most appropriate to your scope of practice within the laboratory. Where tasks/areas are performed in the lab it would be beneficial to include them in your portfolio. |

## GLOSSARY

The following terminology may be used throughout the portfolio.

| | |
|---|---|
| Assess | Decide the value or importance |
| Competent | Has the ability to perform a test, procedure or area of practice to a set standard on more than one occasion, in a consistent manner and with minimal or no supervision, together with a thorough comprehension of the principles and concepts of the content of the key task |
| Demonstrate | Candidates evidence shows personal practice |
| Discuss | Write and talk about a subject in detail considering different ideas and information |
| Evaluate | Determine and explain the value or importance |
| Explain | Make something clear and easy to understand by describing and giving information about it |
| HCPC | Health and Care Professions Council |
| Identify | Find relevant information and describe it |
| SOP | Standard Operating Procedure |
| Summarise | Express the most important facts in a short and clear form |
| UKAS | United Kingdom Accreditation Service |

## Additional Resources and Reference Documents available on the Institute of Biomedical Science website www.ibms.org

The following documents are freely available in the public area of the IBMS website.

Good Professional Practice for Biomedical Scientists
Benchmark guidance summarises current regulations and guidance relating to laboratory medicine, provides information on generic requirements set by regulation and clarifies how these relate to biomedical science.
https://www.ibms.org/resources/documents/good-professional-practice-in-biomedical-science/

Institute's Code of Conduct
The Code consists of principles, which Institute members are expected to observe in the interests of patient care and in order to promote confidence in the profession of biomedical science.

Clinical Laboratory Standards for IBMS Qualifications and Guidance for Training Laboratory Management and Approval
The IBMS approves laboratories for training of its portfolio based qualifications. These standards look at laboratory training, standards of good practice and outlines best practice for the management and delivery of laboratory training.

Equal Opportunities and Diversity Monitoring Policy IBMS QM 801
https://www.ibms.org/go/members/join-ibms/application-forms

Complaints Handling Process
https://www.ibms.org/contact-us/customer-service/

IBMS Support Hub 8: Plagiarism Demystified - How to avoid the copy paste trap
https://www.youtube.com/watch?v=kwq6Gns6rrw

Brightspace Training Guide for Trainers and Candidates
https://www.ibms.org/resources/documents/ibms-specialist-portfolio-brightspace-training-guide-tr/
https://www.ibms.org/resources/documents/ibms-specialist-portfolio-brightspace-training-guide-for/

In addition for IBMS members only
Institute's CPD scheme The IBMS CPD scheme encourages members to maintain, improve and extend their knowledge, skills and practice for the purpose of maintaining Continuing Professional Development (CPD).

About this document

Document title: Specialist Portfolio Guidance for Candidates, Trainers and External Examiners

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Version: Version 3 Active date: Nov 2024 Review date: Nov 2024 Copyright and disclaimer