



Certification Program



Candidate Handbook

Ensuring Quality Biorisk Management Through Certification of Professionals





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IFBA Certification Body

The Certification Body (CB) of the International Federation of Biosafety Associations (IFBA) is a multi-stakeholder, administratively independent body which provides direction for and administration of the certification of biorisk management professionals worldwide. The CB strives to ensure safe, secure and responsible work with biological materials by certifying that qualified and competent personnel are engaged in the management of biological risks. The CB is structured to and conducts its operations in harmony with ISO/IEC 17024:2012 "Conformity Assessment – General Requirements for Bodies Operating Certifications of Persons". The CB acts impartially and ensures fair and equitable treatment in relation to its applicants, candidates, and certified persons.

The mission of the IFBA Certification Body is to provide excellence in certification of technical competencies for biorisk management professionals worldwide.

About the Candidates Handbook

This handbook contains information on the IFBA's professional certification process and assists candidates in preparing for the examination and maintaining their certification. It is the candidate's responsibility to read and understand the contents of this handbook before applying for certification. Specifically, information is provided on:

- Applying for certification
- Studying and preparing for the examinations
- Scheduling and taking the examinations
- Maintaining certification and recertification requirements
- Certification fees
- General policies and procedures governing the certification program

Statement of Non-discrimination: Certification is offered to all eligible persons regardless of age, gender, religion, national origin, marital status, sexual orientation or disability. The CB ensures fair and equitable treatment of all candidates throughout all phases of the certification process.

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1.0 About the Certification Program

1.1. Introduction

The International Federation of Biosafety Associations' Certification Body (CB) delivers a certification program to a wide range of professionals working with and around biological materials in functions such as biorisk management and biosafety officers, laboratory scientists, technicians, researchers, facility operations and maintenance personnel, biocontainment engineers and architects, educators, consultants, and policy makers. This distinctive program promotes safe, secure, and responsible work with biological materials by ensuring that qualified and competent personnel are engaged in the management of biological risks. Individuals with an IFBA certification bring increased value to their employers by demonstrating competence to carry out their responsibilities and by achieving high standards of excellence, professionalism, and continuous learning. By earning certifications from the IFBA, individuals reap the benefits of safer workplaces, career advancement, and international recognition among colleagues.

Objectives of Certification:

- Enhanced safety and security of biorisk management professionals, laboratorians, scientists, and the general public;
- Increased government and public confidence in biosafety and biosecurity practices and programs;
- Increased government and public confidence in those who work with biological materials;
- Enhanced recognition and endorsement of biorisk management as a credible and skilled profession;
- Increased incentive for biorisk management professional competency requirements to be included in standards, guidelines, and legislation; and
- Greater demand for services of biorisk management professionals with demonstrated competence.

The IFBA's certification program was developed in compliance with ISO/IEC 17024: 2012 "Conformity assessment - General Requirements for Bodies Operating Certification of Persons" to ensure that all candidates meet a common standard, through a consistent application and testing process, and an objective evaluation of professional knowledge and skills. Certifications are based on a Body of Knowledge (BOK) developed by international subject matter experts and validated through a Job Task Analysis (JTA) process designed to identify and validate the knowledge and tasks that are required to demonstrate competence. The IFBA's JTA process included an international survey of biorisk management professionals to assess the criticality and frequency of each knowledge and task statement, the results of which serve as the blueprint for the design and content of the examinations.





1.2 Certification

The IFBA offers certifications in a number of technical disciplines related to the field of biosafety, biosecurity and biorisk management. A valid Professional Certification (PC) in Biorisk Management is a pre-requisite certification required before candidates are eligible to apply for certification in additional technical disciplines. To become certified, each individual must pass the IFBA CB's examinations. Each successful candidate will receive a certificate and is entitled to use the "IFBA PC" designation after their names. This designation demonstrates that individuals have the understanding and knowledge they need for a specific technical discipline. Certifications are effective from the date the examination is passed and valid from that date through a 5-year period which begins on January 1st of the year following the date of passing the examination. Certificants must then undergo a recertification process to ensure continued competence.

Professional Certifications in the following disciplines are currently being offered:

- Biorisk Management (Pre-requisite certification for all others); online exams are offered
 in English; paper-based exams are offered in English, French, Spanish, Arabic & Russian
- Biological Waste Management; online exams are offered in English; paper-based exams are offered in English, French, & Arabic
- Biocontainment Facility Design, Operations & Maintenance; online exams are offered in English;
- Biosafety Cabinet Selection, Installation and Safe Use; online exams are offered in English; paper-based exams are offered in English, French, & Arabic
- Biosecurity; online exams are offered in English; paper-based exams are offered in English, French, & Arabic

Steps to Certification

- 1. Decide which certification is right for you
- 2. Prepare for the exam by reviewing the examination content and studying
- 3. Complete your application on-line at https://candidate.internationalbiosafety.org/
- 4. Register for the exam and submit the application fee
- 5. Take the exam
- **6.** Receive your certification
- 7. Maintain your certification and recertify every 5 years

2.0 Applying for Certification

2.1 Eligibility Requirements

IFBA certifications are available to a wide range of professionals working with and around biological materials in functions such as biorisk management and biosafety officers, laboratory





scientists, technicians, researchers, facility operations and maintenance personnel, biocontainment design engineers and architects, educators, consultants and policy makers. Each applicant must take time to assess and judge his/her own readiness to apply and take the certification examinations. A careful review of the knowledge and task statements in the examination content outline, the sample exam questions, and references are essential before candidates make the decision to apply for certification.

Candidates who are ready to apply for the Professional Certification (PC) in Biorisk Management can apply at any time. While there are no specific eligibility requirements and pre-requisites, we emphasize that this certification is geared towards individuals who have knowledge and experience in the field of managing biological risks. A valid Professional Certification (PC) in Biorisk Management is a pre-requisite certification required before candidates are eligible to apply for IFBA certification in additional technical disciplines.

2.2 Application Procedure

Applications for certification are accepted at any time but must be submitted via the IFBA's Certification Portal at https://candidate.internationalbiosafety.org/. The Certification Portal User Guide will assist individuals through the application process. Applicants must agree to abide by the IFBA Certification Code of Conduct and Statement of Confidentiality before they are eligible to register for an examination (this process is completed electronically within the Certification Portal). Applicants must also ensure they have pre-requisite certifications (e.g. Biorisk Management) before they are permitted to take any further certification examinations. (Please refer to Section 4.2 of this handbook for a copy of the Code of Conduct and Section 5.2 for the Statement of Confidentiality).

For a copy of the Certification Portal User Guide, please visit the IFBA's website or contact the IFBA Secretariat at secretariat@internationalbiosafety.org

2.3 Certification Fees

Fee Structure

The certification application fee for Professional Certification in each technical discipline is set at \$200.00 USD to cover administration costs for each candidate. For convenience, the online Certification Portal enables payment of fees directly to the IFBA. Certification application fees are non-refundable regardless of whether the candidate passes or fails the examination. It is important to note that candidates who reschedule their examination less than 24 hours before the scheduled examination date and time, will be charged a rescheduling fee of \$30.00USD. Candidates who fail to appear at their exam date and time will be charged a rescheduling fee of \$50.00USD.





The recertification fee for each technical discipline is set at \$150.00 USD to cover the costs of reviewing the application and administering the recertification process. Recertification application fees are non-refundable regardless of the outcome.

International Scholarships

In order to increase accessibility of the certification program internationally and in particular to resource-limited countries around the globe, the IFBA's CB implements an international scholarship fee structure. The scholarship program is designed to empower those in need of international credentials in biorisk management, who live in resource-limited countries where economic circumstances impact their ability to pay the full certification and recertification fees. Applicants who currently reside and have responsibility for biorisk management in eligible countries will receive discounted fee pricing of \$100.00USD for all certifications and \$75.00USD for all recertifications.

For a current list of eligible countries for scholarship pricing, please contact the IFBA Secretariat at secretariat@internationalbiosafety.org

3.0 Examination Procedures

3.1 Preparing for the Examinations

The IFBA's examinations are a standardized measurement of the knowledge and skills expected of professionals in specific technical disciplines related to the management of biological risks. The IFBA CB publishes the Body of Knowledge for each examination, outlining the domains (topic areas), task statements, and knowledge statements specific to each technical discipline. The Body of Knowledge also notes the percentage of exam questions (called "items") per domain. Candidates are strongly encouraged to become thoroughly familiar with this content as part of their preparation. In order to familiarize candidates with the nature and form of the examination questions, sample questions have been provided. These questions reflect the range of content and difficulty that would be typical on the examination; however, this small sample does not provide a complete picture of the diversity that candidates should expect to encounter on the actual examination. Following each question is the correct or best response (called the "key"). Examination questions are written from a wide variety of publications and resources in the field; suggested references have also been provided to assist candidates in preparing for the examination.

For a copy of the Body of Knowledge and Study Guide for each certification offered, please visit the IFBA's website or contact the IFBA Secretariat at secretariat@internationalbiosafety.org





Potential applicants may also contact the IFBA's Member Biosafety Associations which offer training courses relevant to biorisk management. The IFBA does not sponsor, endorse, or financially benefit from any training or review courses for the IFBA examinations. Current Members and available training providers are listed on the IFBA's website at www.internationalbiosafety.org

3.2 Examination Content and Blueprints

Examinations for Professional Certifications are objective, multiple-choice tests consisting of 100 questions. All questions are randomly placed throughout the examination, and are worth one mark each. Four possible answers are provided for each (a, b, c, and d), with only one designated as the correct or best choice. It is to the candidate's advantage to answer every question on the examination, since the final score is based on the total number of questions answered correctly. There is no penalty for selecting an incorrect choice.

The examination content is based on a Job Task Analysis which surveyed biorisk management professionals worldwide on the knowledge they require and tasks they perform under major domains (topic areas). Each question on the examination is directly linked to these task and knowledge statements. Data collected on the importance, criticality, and frequency of the knowledge and task statements was used to determine the percentage of examination questions related to each domain. This process results in the exam blueprint. All examination questions were written and reviewed by both subject matter experts and test development experts. The Modified Angoff Method is then used to set the minimum passing score.

3.3 Taking the Examination

Candidates will have several opportunities to take the certification exams as follows:

- A computer-based examination using Examity® at the candidate's site or other preapproved suitable location.
- A written paper-based exam with an IFBA approved proctor at IFBA Member Biosafety Association conferences and other events.

Computer-based testing using the *Examity®* platform is the standard method of administering IFBA's online examinations with remote proctoring at the candidate's site. The *Certification Portal User Guide* will assist individuals through the application and online examination process. Paper-based written examinations are also offered in certain situations with IFBA approved invigilators (i.e. exam proctors) to administer and supervise the process. The invigilator will enforce the time allocated for candidates to complete the examination and ensure that no external assistance or reference material is used. At the end of the examination, all paper-based tests are sealed, signed across the seal by the candidate and given to the invigilator.

For a copy of the Certification Portal User Guide, please visit the IFBA's website or contact the IFBA Secretariat at secretariat@internationalbiosafety.org





Candidates who are eligible to take the examination must present valid government issued photo identification with signature in order to take an IFBA examination. It is important to note that candidates who reschedule their examination less than 24 hours before the scheduled examination date and time, will be charged a rescheduling fee of \$30.00USD. Candidates who fail to appear at their exam date and time will be charged a rescheduling fee of \$50.00USD. If a written paper-based examination is cancelled by the IFBA (e.g. inclement weather, natural disasters), candidates will be offered an alternate examination date. IFBA, however, is not responsible for any personal costs or expenses incurred by candidates in the event that an examination is cancelled. If a power outage occurs during an examination session, the candidate will be provided with an opportunity to re-take the examination using a different exam version.

The examinations are closed book; referring to notes, study guides, books and other reference materials are not permitted during the examination. Personal items such as cell-phones, cameras, iPads and other electronic devices are also not allowed. The examinations are scheduled for 2 hours with 100 questions. Only the questions you answer correctly are scored. There are no penalties for answering a question incorrectly, so answer as many questions as you can. If you are unsure of a response, eliminate as many options as possible, and choose an option from those that remain. The IFBA grades all examinations fairly and test scores are based on the number of questions answered correctly.

All candidates taking the examination are required to abide by a statement of confidentiality which restricts candidates from sharing any information about the examination with other individuals, including discussions with fellow test takers following the examination, and the sharing of information with colleagues who might be planning to take the examination in the near future. (Please refer to Section 5.2 of this Handbook for a copy of the Statement of Confidentiality).

3.4 Examination Results

Examination results will be emailed to candidates directly from the Certification Portal and will include a summary of the score obtained in each exam content domain. Scores are strictly confidential and can neither be obtained over the phone nor sent to a third-party. Successful certificant names will be published on the IFBA's online directory of certified professionals. Candidates who fail an examination and wish to apply to take the same exam again, must complete the exam retake application and submit the required fees.

The IFBA Secretariat issues a certificate package to all successful candidates in a chronological queue dependent on the time at which a candidate passes their exam. Soft copies of the candidate's certificate package, which includes their certificate and congratulatory letter from the Chair, Certification Body, will be sent via email to the candidate. A hard copy of the certificate package will be sent via untracked post to the address that the candidate has provided in the Certification Portal, and its delivery time is dependent on regional postal systems. The hard copy of the certificate package will additionally contain an IFBA Certified





Professional lapel pin, as well as a wallet card which candidates may use as proof of certification.

Any questions concerning examination results should be directed in writing to the IFBA Certification Body at secretariat@internationalbiosafety.org

3.5 Requests for Special Examination Accommodations

An applicant who wishes to request modifications in the examination environment due to a disability must notify the IFBA Certification Body in writing at the time of application, followed by the presentation of documentation regarding the disability and the implementation of the candidate's consequent accessibility needs. Unless the applicant's disability would prohibit certification for the requested technical disciplines, the CB will work directly with the applicant and examiners to accommodate the applicant's accessibility needs within the testing environment. In this way, the applicant may perform the examination under conditions which will accurately reflect the individual's competency in the tested discipline. To submit a request for special exam accommodations, please contact the IFBA Secretariat at secretariat@internationalbiosafety.org

4.0 Maintaining Your Certification and Recertification

4.1 Using your IFBA Certification Credential

After successfully passing the examination, certificants are eligible to use the IFBA certification credential IFBA PC, followed by the name of the technical discipline in which they are certified (e.g. IFBA PC, Biorisk Management). The IFBA's certification logo may be used by certified individuals in their personal business (e.g. business cards, resumes, and personal web site) as a way of showing pride in their professional certification. The certification logo, as used by certificants, certifies that



biorisk management professional services are being rendered by persons who have demonstrated professional knowledge and competency in the technical discipline to which they are certified against.

The CB's certificates and logo are available for use by certificants subject to the following requirements:

 if certification should cease for any reason, the use of the certificate and logo must be discontinued immediately;





- the logo shall not be used in any misleading manner, subject to the sole discretion of the IFBA CB;
- the certificate and logo may not be revised or altered in any way, and must be displayed in the same form as provided by IFBA CB;
- the logo may be used on business cards, letterhead, promotional brochures, biographical material, advertising, website, or any other publication or material that promotes the biorisk management professional's work;
- the logo may be placed in close proximity to the certificant's name, however, not so close as to suggest it is connected or a part of the certificant's personalization or degree;
- the logo shall not be confused with a company logo or placed in such close proximity to a company name or logo so as to give the reader the idea that the CB's logo certifies the company;
- the use of the logo does not indicate any legal guarantee by the IFBA CB, any direct endorsement of services, or that the individual is acting on the IFBA's behalf;
- the IFBA CB reserves the right in its sole discretion to require the removal of the logo from any location or item the IFBA CB feels does not comply with these terms, or which could or does discredit the IFBA; and,
- if the IFBA CB gives notice to remove the logo and/or discontinue use of the certificate, it must be done immediately.

Each certificant accepts and assumes sole responsibility for understanding and satisfying all applicable governmental and legal professional requirements, including those requirements that may apply to the use, display and/or advertising of the IFBA CB's certification. The IFBA CB assumes no responsibility concerning the application of such governmental and legal requirements. The IFBA CB shall not be responsible or liable for any claims, complaints, suits, or damages whatsoever, regarding the use of the certification certificate and logo.

4.2 Code of Conduct

The IFBA CB maintains that certification carries an obligation for maintaining the value and good name of IFBA's certifications and that the candidates they certify act professionally and support and promote their profession. All certificants are thus required to subscribe to the CB's Code of Conduct as a condition of obtaining and maintaining their certification. As part of this process, candidates are required to sign an agreement to comply with the provisions of the certification scheme, to make claims regarding their certification only with respect to the scope for which it was granted, not to use the certificate in a misleading manner, and to discontinue all claims to certification upon withdrawal of the certification. Certification may also be revoked at any time and the applicant may be barred from admission to take future certification examinations if it is established that the information contained in, or supplied in support of, an application for examination is inaccurate in any material respect or if it is established that the applicant engaged in any inappropriate conduct during the examination (such as giving or





obtaining unauthorized information or aid). In the event of suspension or revocation of certification for failure to comply with the Code of Conduct or any other reason, certificants must return the certificate to CB and cease all claims to the certification title.

The Code of Conduct requires certificants to:

- Comply with the relevant provisions of the certification requirements;
- Provide accurate and truthful information to the IFBA CB concerning all certification related eligibility information and submit valid application materials for fulfillment of current certification and recertification requirements;
- Maintain the security, and prevent the disclosure, of the IFBA CB certification examination information and materials;
- Not act in any way that would prejudice the reputation of the IFBA CB or the respective certification process;
- Make claims regarding their certification only with respect to the scope for which it was granted;
- Not use the certificate in a misleading manner;
- Discontinue all claims to certification upon withdrawal of certification;
- Co-operate fully with any inquiry or investigation in the event of any complaint, appeal or alleged breach of this code;
- Act professionally and strive to increase the competence, prestige and public regard of their profession;
- Protect and promote the safety and security of people, property and the environment above any consideration of self-interest;
- Take due professional care and have the competency, skills and knowledge to perform the required work;
- Endeavour to continuously improve skills and proficiency through practice, education and professional development;
- Support and encourage fellow biorisk management professionals to develop professionally;
- Represent qualifications and competencies, or advertise services, only through factual representation without exaggeration;
- Remain free from any influence, conflict of interest, or relationship that impairs professional judgement, independence, impartiality or objectivity; and,
- Protect the confidentiality of all professionally acquired information and disclose such information only when properly authorized or when legally obligated to do so.

4.3 Recertification

It is essential that biorisk management professionals remain up-to-date on the latest approaches to the safe and secure handling of biological materials. Regular recertification through ongoing experience and professional/academic development ensures that individuals





maintain their knowledge and skills, as well as stay current on developments in the field. The program also promotes opportunities for both professional and personal enrichment. The IFBA's certifications are valid for a period of 5 years after which the certificants must undergo a recertification process. The 5 year period was developed appropriately reflecting the rate of change in the biorisk management field while being appropriately practical. Documented activities demonstrating continued competence and continued practice must be completed and submitted to the IFBA's Certification Body prior to the certificate expiration date. Failure to do so will result in expiry and individuals will be identified as "Inactive". The goals of the Recertification Program are to:

- Assess maintenance of knowledge and skills over time;
- Ensure continuing competence;
- Assess the ability to provide services at the specified level of competency throughout a certificant's professional career;
- Encourage continued professional development; and,
- Promote lifelong learning.

Recertification cycles begin the day an individual becomes certified and end on December 31st of the 5th full year following the start of the certificants cycle. The program requires that individuals document their activities and acquire a total of 40 points across the categories defined by the IFBA CB and earn the minimum required points in each category. Certificants will be asked to attest to attaining the required number of points by submitting the completed recertification form and supporting documentation. The IFBA will send certificants a reminder at the beginning of the calendar year in which the 5 year recertification is due. However, it is recommended that certificants track their professional activities throughout the 5 year cycle and not wait until they are notified.

For a copy of the recertification requirements and application form please visit the IFBA website or contact the IFBA Secretariat at secretariat@internationalbiosafety.org

5.0 General Policies and Procedures

5.1 Complaints and Appeals

The IFBA Certification Body investigates and examines all appeals and complaints received from applicants, candidates, certified persons and their employers, and other parties about the certification process and criteria, as well as policies and procedures for the performance of certified persons. If you are unhappy with aspects of the certification process, you are entitled to file a written complaint with the CB. The IFBA endeavours to investigate complaints in a





timely, constructive, and impartial manner. The complaint is assigned to a suitable investigator, and a correction, cause and corrective, or preventative actions are determined and carried out.

If you are unsuccessful in your application for certification, and you feel that the application was handled inappropriately, you are also entitled to appeal the certification decision. A CB Appeals Board specific to the title in question will be convened to consider the candidate's reason(s) for the appeal. The Appeal Board may seek further information from the appellant or any other person, organization, or office that it feels appropriate and reviews any materials that it feels appropriate to determine the appeal staying with IFBA policy and taking measures to avoid any conflict of interest. The appellant will be notified of the decision and will be provided with an explanation of the assessment decision following a re-evaluation of the evidence.

Further details on the procedures for filing a complaint or an appeal can be obtained from the IFBA Secretariat at secretariat@internationalbiosafety.org

5.2 Confidentiality

While the CB considers the certification or recertification status of its certificants to be public information, all CB certification documents relating to certification tests and examinations are considered private, confidential, and proprietary information. An individual's personal information will be kept confidential and will not be disclosed to an unauthorized party without the written consent of the individual (applicant, candidate or certificant), except where the law requires such information to be disclosed. A directory of individuals who currently hold a CB certification will be published on the IFBA's website and will only include the certificant's name and country of residence.

All candidates are required to abide by a statement of confidentiality which restricts candidates from sharing any information about the examination with other individuals, including discussions with fellow examination takers following the examination, and the sharing of information with colleagues who might be planning to take the examination in the near future. All candidates who register for a CB certification examination are required to sign the following Statement of Confidentiality before taking an exam:

My signature below indicates that I have read, understood, and agree to be bound by the requirements of the following Statement of Confidentiality:

- This examination and the test questions contained herein are the exclusive property of Certification Body.
- 2. This examination and the test questions contained herein are protected by copyright law. No part of this exam may be copied or reproduced in part or whole by any means whatsoever, including memorization.
- 3. The theft or attempted theft of an examination booklet is punishable.





- 4. My participation in any irregularity occurring during this examination, such as giving or obtaining unauthorized information or aid, as evidenced by observation or subsequent analysis, may result in termination of my participation, invalidation of the results of my examination or other appropriate action.
- 5. Further discussion or disclosure of the contents of the examination orally, in writing, or by any other means, is prohibited. Failure to comply can result in termination of my participation, invalidation of the results of my examination, or other appropriate action.

5.3 Impartiality and Non-Discrimination

The IFBA's CB and Secretariat understand the importance of impartiality and the consideration of any potential conflict of interests in carrying out its certification activities. Certification is offered to all eligible persons regardless of age, gender, religion, national origin, marital status, sexual orientation or disability, and the CB ensures fair and equitable treatment of all candidates throughout all phases of the certification process. All CB decisions related to certification (including granting, suspending and withdrawing) are made impartially and free from non-discriminatory judgements.

Certification of individuals is based on evidence obtained by the CB through an objective, valid and reliable assessment. The certification procedures have been designed to enable candidates to attain optimal performance on the exam by providing essential information before taking the test including exam content, sample questions and study references. Care is also taken to ensure the testing procedures and environments are conductive to good performance. Failure to pass an examination should only be the result of inadequate knowledge or skill.

The CB continually identifies and assesses risks which may pose a threat to impartiality and inspires confidence in its certification by:

- Safeguarding impartiality;
- Being fair and non-discriminatory;
- Being responsive to applicants, candidates, and certificants;
- Ensuring transparency of processes; and,
- Maintaining confidentiality.

