



# Online short course **Integrated River Basin Management**

**Course period:** March-June (yearly)

**Awarded:** Certificate (5 ECTS) / Certificate of Attendance

**Additional info:** See [http://www.unesco-ihe.org/education/short\\_courses/online\\_courses](http://www.unesco-ihe.org/education/short_courses/online_courses)

## Objectives of the course

*Integrated river basin management is one of the biggest challenges of the 21st century*

River basins sustain ecosystems that are the main source of water for households, agriculture and industry, and fulfil many non-consumptive uses. Many river basins face problems. Due to population growth, economic growth and over-exploitation, the demands made on river basins are increasing and their capacity to meet these demands decreasing. In this context Integrated River Basin Management (IRBM) is a concept that is receiving increasing attention.



At the end of the online Integrated River Basin Management course participants will be able to:

- Explain interaction between development, water and environment at the river basin scale
- Explain the importance of holistic approaches in river basin research and management
- Give an overview of the latest concepts, international trends and practices of Integrated River Basin Planning and Management
- Follow a step-wise approach in applying Integrated River Basin Planning and Management in a river basin.

### Why take this online course?

- through innovative learning methodologies you will learn the latest knowledge in the different fields of Integrated River Basin Management and practice the needed skills
- you can follow the course from your home or workplace, with ample opportunities for communication with trainers and participants
- you will meet (inter)national experts and become part of an international network with participants from different regions, sectors and disciplinary backgrounds
- you will get access to up-to-date knowledge and expertise that you can share with your fellow-participants and your colleagues

## Target group

*Professionals active in river basin management*

The course is designed for professionals actively involved in or planning to be involved in the different aspects of river basin management. They may be working at river basin organisations, regional or national governments involved in the different aspects of IRBM, non-governmental organisations, companies or universities and do not have the time to take a course that lasts several weeks abroad.

## Course content and time schedule

*Online learning, 4 months, 8 hours per week (total study load 140 hours)*

The course entails a combination of high-quality lecture notes blended with examples and case studies to highlight applications of concepts taught and discussions to share experiences. Regional case studies are used throughout the course work to enable participants to learn the subject within an international setting. These case studies are used for several key assignments in the course, amongst which the final exam. Additionally, they provide a constant frame of reference for application of the theory taught in the course.

Participants complete the course in a period of four months with a workload of 140 hours (8 hours a week on average). The course is sub-divided into 7 subjects and a final paper assignment (Table 1). Each subject starts and ends on a specified day and takes approximately 2 weeks. Within this period, the participant is free to study in his or her own time.

The following PoWER partners contribute(d) to the development and/or implementation of the course:

- Nanjing Hydraulic Research Institute (China)
- Hohai University (China)
- Universitas Katolik Parahyangan (Indonesia)
- Hydraulic Research Institute (Egypt)
- Bahia University (Brasil)
- Water Resources University (Vietnam)

The web-based eCampus (based on the *Moodle* platform) is used for downloading training material and communication. Questions can be posted on the course forums or directly asked to the responsible course trainer. Various interactive options are available to discuss course matter with fellow participants.

**Table 1: Course schedule of the online IRBM course**

Course	Key Questions	Duration	Study load, hours
1. Introduction to the module	Who are my trainers and fellow participants? Why this course and how is it organized?	1 week	8
2. The river system and human interferences	How does the river system work and what are the impacts of humans?	2 weeks	16
3. IRBM concepts and Issues	What are the latest IRBM concepts and issues?	2 weeks	16
4. Planning for sustainable river basin development	How to plan river basin developments?	4 weeks	16
5. Operational management of river basins	How to turn planning into operational management?	2 weeks	16
6. Analytical support for IRBM	What are useful methods and tools for supporting IRBM?	2 weeks	16
7. Organisational and institutional framework	How to organize planning, operational management and analytical support?	2 weeks	16
8. Final Assignment	How do I use what I have learned in my own river basin?	1,5 weeks	8
9. Exam	How does the course material apply to a real-life case?	1,5 weeks	8

## Assessment

Each subject ends with either a tutor or discussion assignment for which participants have to use their newly acquired knowledge and interact with the teacher and the other participants. The participant's progress will be evaluated based on these assignments and the final paper. After completion, participants will receive a certificate jointly issued by UNESCO-IHE, NHRI, Hohai University and UNPAR. The final mark will be given based on marks you receive for the tutor assignments including the final assignment and on an active involvement in the group discussions. Below is indicated how the final mark is calculated. The course is considered to be successfully completed if the score > 60 %.

▪ Tutor assignments (Course 2 and 6 each 10 %)	20 %
▪ Active contribution group discussions (Course 3, and 7 each 5 %)	10 %
▪ Group Assignment (Course 4)	15 %
▪ Final assignment	15 %
▪ Final exam (optional)	40 %
	<b>100 %</b>

## Certificate (5 ECTS) / Certificate of Attendance

Participants who successfully complete the online course by completing all the above-listed course components (score greater than 60%) receive a Certificate. This certificate will be accompanied by a course record, mentioning the period of study, the study load, subjects, and the mark or grade obtained. The Certificate is equivalent to 5 ECTS, which can be used for an exemption for an equivalent module in the UNESCO-IHE MSC programmes.

Participants who complete the course (at least 80%), but do not participate in the final exam (or fail for the exam) will receive a Certificate of Attendance.

## Innovative learning

*The best of traditional and distance-learning combined*

### ADVANTAGES:

- The course can be followed at any location; as long as participants have an Internet connection they can access *eCampus*: a state of the art online learning environment implemented early 2010.
- The course combines challenging lectures with group interaction, multi-point discussions and ample further reading material.
- The course focuses on life-long learning where professionals combine the material taught with daily work and can immediately apply acquired knowledge.
- For groups, there is the option to combine online learning with face-to-face workshops or video-conferences (GDLN).



**Innovative Learning**

Since 2005, over 120 enthusiastic participants worldwide participated in six batches of the course.

## Fee

The fee is 550 Euro, which includes access to the web-based *eCampus*, its training materials and full training support. Group discounts are possible.

## Entry requirements

- See target group.
- Also access to a computer with 512 kilobits per second (kbps) downstream Internet connection or better is required.

The screenshot shows the UNESCO-IHE eCampus interface. The main heading is "Online Modules Through UNESCO-IHE". Below it, there is a paragraph describing the modules: "UNESCO-IHE offers high-quality online modules in an increasing number of topics of interest in the water sector. The innovative delivery format makes learning exciting, flexible, interactive and effective. It allows participants anywhere in the world to learn at their own convenience, and immediately apply their newly acquired knowledge in their working environment." It also mentions that the modules are intended for professionals working in public and private institutions, NGOs, and academic institutions, and are ideal for those with families who want to upgrade their skills from the comfort of their own home or office. A typical module covers a four-month period and requires around eight hours of study per week (total study load 140 hours). During an online module, UNESCO-IHE lecturers provide intensive guidance, and there are many opportunities to obtain feedback from and interact with fellow participants. Participants can access the online modules at any time via UNESCO-IHE's Online Learning Environment, which can be used to download training materials and for communication. It contains lecture notes and learning tools such as presentations, videos featuring case studies from various countries, interviews with experts, quizzes and audio materials, as well as a discussion area where fellow participants and lecturers can meet.

At the bottom of the screenshot, there is a call to action: "See and feel the UNESCO-IHE: [ecampus.unesco-ihe.org](http://ecampus.unesco-ihe.org)"

## More information and registration

For more information on the course, contact Wim Douven ([w.douven@unesco-ihe.org](mailto:w.douven@unesco-ihe.org)) or see UNESCO-IHE's website (See <http://www.unesco-ihe.org/online-courses>) where you can also download registration forms and see information about the other online courses available.