

# Embark on the online Master of Science(MSc)\* in Artificial Intelligence and Big Data

## About BIHAR & eBIHAR



BIHAR (*Big Data Intelligence for Human Augmented Reality*) is a 2 years Master of Science degree (MSc) in Computer Science from ESTIA ([www.estia.fr](http://www.estia.fr)) the School of Engineering in the South West of France, with a strong focus on Artificial Intelligence and Big Data. BIHAR corresponds to 120 ECTS\*\* with 4 semesters or 60 ECTS with 2 semesters for those accepted with a Bachelor in 4 years or a 1st year MS degree in Computer Science. Dual Master degree is possible with University of Siena (Italy), EMU (Cyprus), and eMIAGE (University of Lyon).

eBIHAR is a 1 year online Master of Science degree which corresponds to the MOOC version of BIHAR MSc. eBIHAR program is divided into two parts : 2/3 of online courses are brought by professors from ESTIA & the University of Siena, and 1/3 of the online courses are provided by Oracle and Google. This Master's degree is part of Datum Academy's strategy to produce and launch high level professionalizing European MOOCs with dual academic and industrial certification.

\* Accredited by Conference des Grandes Ecoles

\*\*ECTS : European Credit Transfer System



Are you ready to take  
the digital leap ?

Visit  
[www.estia.fr](http://www.estia.fr)  
to find out more

The main goal of this Master's degree is to train you to become experts in the use of Artificial Intelligence in the management of Big Data and in the development of mobile and web applications.

### BIHAR 1st year of Master

(only in France)

- " Database Fundamentals and SQL Programming
- " Database Administration and Tuning Fundamentals
- " Big Data Fundamentals with Oracle
- " Big Data Engineering and Administration
- " Advanced R and Python Programming
- " Web Programming Fundamentals
- " From Java to Javascript
- " Mobile Programming Fundamentals
- " Project Design, Management and Communication (UML, DEVOP)

### BIHAR 2nd year of Master

- " Cloud Programming
- " Distributed Big Data Management
- " Cybersecurity and Blockchain
- " Artificial Intelligence and Natural Language Processing
- " Advanced Machine Learning and Deep Learning
- " Full-stack Web Mobile Programming
- " Augmented Reality and Virtual Reality Applications Development
- " Advanced Mobile Programming
- " Agile and NFC Programming
- " Multidisciplinary and Soft Skills (Erasmus DATA TOKI)

### Key Benefits

- " Double international certification : 90 ECTS for the 1st year and 120 ECTS for 2 years with possible industrial certification (Oracle and Google)
- " Giving you the best expertise from both international academic and professional industry
- " Learning 5 key jobs in the Data Economy : Data engineer, Big Data Architect, Data Scientist, Cloud and Cybersecurity Project Manager, and Mobile/Web Developer
- " International Connected Digital Campuses in support

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