



EDU

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Foundations of
PRECISION MEDICINE

• studyprecisionmedicine.com •

2019

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EDU

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WELCOME TO PRECISION MEDICINE AT EDU

Precision Medicine is a personalised and effective approach to medicine that's changing the roles and functions of medical staff and scientists, modern clinical practice, and, ultimately, the future of healthcare.

At EDU, we are excited to offer a completely digital part-time 12-week course into this emerging medical field. The course is open to healthcare professionals, executives, entrepreneurs and innovators, young professionals and medical students around

the world. Each week our Precision Medicine learners will spend 6 – 8 hours gaining knowledge and understanding about this developing area of healthcare.

This brochure is designed to give you an insight into our Foundations of Precision Medicine course launching in February 2020 and how we can support you in learning about this growing field.

We look forward to welcoming you.



THE STORY OF EDU

Founded in 2018, EDU is Europe's first digital-native institution offering a variety of courses and degree programmes in medicine, education and more. Our programmes include Europe's first digital medical school – EDU Medical and its course in Human Medicine.

Our state-of-the-art EDU digital learning platform offers a 21st Century education model, incorporating modern didactic methodologies and is fully accessible to students and learners wherever they are.

FOUNDATIONS OF PRECISION MEDICINE AT EDU

Foundations of Precision Medicine is a part-time 12-week digital, remote study course developed with experts in this innovative field. Supported by a community of medical experts, this course is designed to help you understand the field, connect to others in the space, and decide how you want to be involved in precision medicine.

Foundations of Precision Medicine at EDU has been created in partnership with XPOMET and the Precision Medicine Alliance (PMA). Over 12 weeks (6-8 hours per week), via the EDU Digital Campus, the course covers the basics of precision medicine, how Precision Medicine Centres are being implemented, and examines the field's importance and impact on clinical practice and healthcare in the future.



By enrolling in EDU's Foundations of Precision Medicine, participants will benefit from:

- Teaching designed by precision medicine experts and taught via a unique digital learning platform provided by EDU;
- Connecting with a network of professional peers from around the world;
- Collaborating and engaging with healthcare professionals working in clinics, genomics, information technology, pharmacology, research and more;
- Gaining real-world insights of precision medicine in action enabling you to learn from real use-cases;
- The flexibility to study this course anywhere as all teaching is via the digital learning platform.

COURSE STRUCTURE

COURSE	FOUNDATIONS OF PRECISION MEDICINE
Course Designers	EDU in partnership with Precision Medicine Alliance (PMA) and XPOMET.
Language	English
Course Duration	12 weeks
Average hours per week	6 - 8 hours
Total Study Hours	75 hours
Fee	€1500
Start Date	February 2020
Registration	Open

CORE LEARNING OBJECTIVES:

Each module in EDU's Foundations of Precision Medicine course explores different aspects of the field. By the end of the course, participants will be familiar with precision medicine, its associated terms, and be able to:

- Define and discuss what genomics and precision medicine are at a foundational level from a biological standpoint in relation to healthcare.
- Give examples of how genomics and precision medicine are currently used in relation to healthcare employees, stakeholders and patients and synthesise its potential impact for the upcoming years.
- Outline the scientific, policy, and ethical implications that genomics can have within healthcare application(s) for all stakeholders.
- Recognise the key players in Precision Medicine in terms of both researchers and stakeholders.
- Explain why incorporating digital health technologies into the healthcare workforce will not make healthcare workers superfluous.
- Decide how they wish to be involved in the future evolution and development of precision medicine.

COURSE STRUCTURE

EDU's Foundations of Precision Medicine course consists of three modules taught over 12 weeks using the EDU digital learning platform.

MODULES

- 1 Foundations of Precision Medicine (wk 1 - 4)
- 2 Precision Medicine in Clinical Practice (wk 5 - 8)
- 3 The Future of Precision Medicine (wk 9 - 12)

As part of each module participants complete group assignments, self-assessments and end the course with a final exam that is taken online. All teaching is conducted via EDU's digital learning platform, uniquely designed to allow remote collaboration between participants, as well as virtual attendance to seminars and keynote presentations.



Each module of Foundations of Precision Medicine spans 4 weeks. The first 3 weeks are what we call the Digital Learning Phase. During this phase, participants explore the theories, tools and general subject matter of the module and join group work related to the content.

The final week of each module is a "Wrap Up" week, allowing participants to ensure their work for the module is completed.

COURSE STRUCTURE: WHAT YOU WILL STUDY

MODULE 1

Foundations of Precision Medicine

Participants in our course will gain an introduction to the topics of Precision Medicine and Genomics. They will also learn the foundational terms and basic principles required for the rest of the course.

Topics covered in this module include:

- Genomics, Transcriptomics, Epigenomics and the Microbiome
- The Human Genome Project and the 1000 Genomes Project
- Real world data, medical health records and imaging
- The basic model and structure of Precision Medicine
- Information technology and infrastructure
- Knowledge generation through machine learning and other techniques and more!

MODULE 2

Precision Medicine in Clinical Practice

The second module in this digital course explores today's implementation of Precision Medicine through Precision Medicine (PM) Centres and covers some of the main issues and challenges with the traditional "one-size-fits-all" medical model.

During this module, participants will cover the topics including:

- What is PM, where is it today, why is it important
- Ethics and GDPR
- The paradigm shift in disease classification and clinical trial design
- Precision Medicine Centres today
- Population-scale genomics.

MODULE 3

The Future of Precision Medicine

In the third and final module participants will consider the future of Precision Medicine in relation to their own health and healthcare. Specifically in this module, participants will learn about establishing a more unified medical model and the expected impact digitalisation of medical data will have on healthcare systems.

Topics covered in this final module include:

- Bioprinting technologies and wearables related to health
- The Human Cell Atlas Project
- Bio and organ printing technologies
- Regenerative medicine
- The impact of digitalisation and Precision Medicine on healthcare systems.

THE PRECISION MEDICINE COMMUNITY

The EDU Foundations of Precision Medicine course is supported by a community of medical experts, including:



Dr. Henri Michael von Blanquet M.D., MaHM

Founder of the Precision Medicine Alliance (PMA)
Medical Board Chairman of XPOMET Medicinale, Berlin

“And my motivation is healing and prevention. That’s precision medicine. What we’re moving towards is not only more precise diagnosis, but better prevention and better health for all.”



Dr. Saskia Biskup

Practice for Human Genetics, Tübingen
Co-Founder Centre for Genomics & Transcriptomics (CeGaT), Tübingen

“Precision medicine is the future. As a practitioner and specialist in human genetic medicine. I work with patients on a day to day basis and understand the impact faster and more efficient genetic diagnostics can have. Genetic diagnosis is the start to the best and most precise therapy for patients - what matters more than that?”



Dr. med. Jasper zu Putlitz

Lecturer at the Hasso Plattner Institute Digital Health Centre

“By digitising our healthcare system where we can and educating those it impacts - from its patients to healthcare industry stakeholders - we are moving toward providing better healthcare, one that is patient-focused and personalised.”



Dr. Dirk Evers

Respected consultant in precision medicine and biotechnology
Former Senior Advisor, New York Genome Centre

“This opportunity is highly motivating to me. That is, to play a part in optimising the production and flow of information in the healthcare system – in effect, to fundamentally improve the system – and thereby positively affecting the lives of everyone.”

STUDYING AT EDU

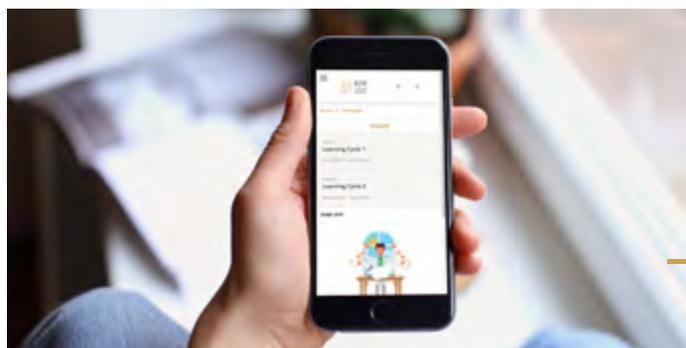
A MODERN 21st CENTURY LEARNING EXPERIENCE

At the core of our participants' learning experience for all our programmes and courses is the innovative EDU Digital Campus; a learning and collaboration focused digital platform.

The Digital Campus is tailor-made to ensure participants have everything they need for success, whenever they need it, while giving them the freedom to study wherever they are. Being exclusively online, participants have 24/7 access to the learning materials, assignments and forum features. And, as the course is open globally, the digital campus also enables participants to connect and communicate with other learners all around the world.



At EDU we know that convenience and flexibility are paramount for our Foundation of Precision Medicine course participants. We believe these are two unique features of our Digital Campus, allowing even those with the busiest of schedules to succeed in our Precision Medicine course— whatever their primary goal may be.



PRECISION MEDICINE AT EDU



COURSE ASSESSMENT

The EDU Foundations of Precision Medicine course uses both group and individual assignments to assess participants work. Participants are encouraged to think critically about sensitive issues and discuss and learn both through their peers and tutors.



COURSE REQUIREMENTS

In order to join and succeed in EDU's Foundations of Precision Medicine course, participants are expected to have:

English - Full competency (at least B2 level)

Digital Competency - Moderate



CERTIFICATE OF COMPLETION

Successful participants will receive a certificate completion once they have finished the 12-week course, provided they pass the course with a minimum of 59% and pass the final proctored exam, taken online, in week 12.



INTERESTED? REGISTER TO STUDY WITH US

EDU's Foundations of Precision Medicine course is open to anyone interested in learning about the field. To register to join our 12-week part-time digital course, starting in February 2020, would-be participants can register via: studyprecisionmedicine.com/register

WHY EDU?

EDU's learning platform, didactics and general approach to study differs from other popular online learning platforms in several ways, the starkest contrast being the exceptional mentor and tutorship.

Learners in EDU programmes and courses benefit from being joined with no more than 5-6 geographically relevant team members. Assigned to each of these teams is a Tutor and Mentor, the former holding the knowledge and experience in the field of medicine and/or biology, providing feedback and answering questions, the latter being a support to the team and a motivator. From team issues to tech questions, your Tutors and Mentors will have the answers you need to succeed.



WHAT TO EXPECT FROM EDU

Assistance and support to ensure you get the most from your learning experience.

We ensure that EDU students are never alone in their studies. Whether this is in the form of tutor or mentor support or guidance from peers, you will always be supported.

Once you are successfully enrolled on to our Foundations of Precision Medicine course, we will provide you with an EDU account, including an email address and a login to the Digital Campus which gives you access to EDU's digital learning platform, academic resources, team workspaces, virtual classrooms and more.

As the course is digital based, IT support is available to participants throughout the working week. We want you to be able to focus on the course and your work commitments, not on solving technical problems.

STUDYING AT EDU FAQ



- **What is EDU?**

EDU (founded in 2018) is a brand of Digital Education Holdings Ltd. (DEH), a private institution for higher education with a vision to substantially increase the quality and accessibility of education.

- **What is EDU's approach to study?**

EDU has a didactic approach to study which is based on five pillars: online teamwork; peer-to-peer learning; mentoring and tutoring; project-based learning; and expert input. They are based on the principles of Democratic Learning, a methodology which aims to empower individuals by encouraging them to take ownership of their learning experience.

- **Who is EDU's Precision Medicine for?**

The course is designed for healthcare professionals, executives, entrepreneurs and innovators in the industry, as well as young professionals and medical students alike.

- **What do I need to access the course?**

You will need a laptop and internet connection with video capabilities.

- **What happens if I have technical issues?**

As your studies at EDU are digital, IT support is available throughout the working week. We want you to focus on your course and work commitments, not on tech problems, so there is always someone able to help you with IT issues.



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WANT TO FIND OUT MORE ABOUT
PRECISION MEDICINE AT EDU?

CONTACT US

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 www.studyprecisionmedicine.com

**12-WEEK PART-TIME DIGITAL COURSE
STARTS FEBRUARY 2020**

REGISTER NOW

studyprecisionmedicine.com/register

more information available at
studyprecisionmedicine.com

A digital course taught by EDU in partnership with XPOMET and Precision Medicine Alliance

