

<http://Project-BlockNet.eu>

**BlockNet:  
BlockChain Network Online Education for interdisciplinary European Competence  
Transfer**

Supplementary materials for the online Learning Activity, 7-11 December, 2020.

Learning Activity platform: [Open.eStudies.VU.It](https://openestudies.vu.it)

This guide explains how to access and use BlockNet online courses.

**Statement of purpose**

The goal of BlockNet is the development and practical implementation of an interdisciplinary Blockchain Technology (BCT) Online Course.

The goal of the Learning Activity is to evaluate the content of the Online Course with the help of students of participating universities, to explore cross-institutional learning opportunities and to improve the Online Course materials following the feedback received from the students' evaluation.

**Disclaimer**

The creation of these resources has been (partially) funded by the ERASMUS+ grant program of the European Union under grant no. 2018-1-LT01-KA203-047044.

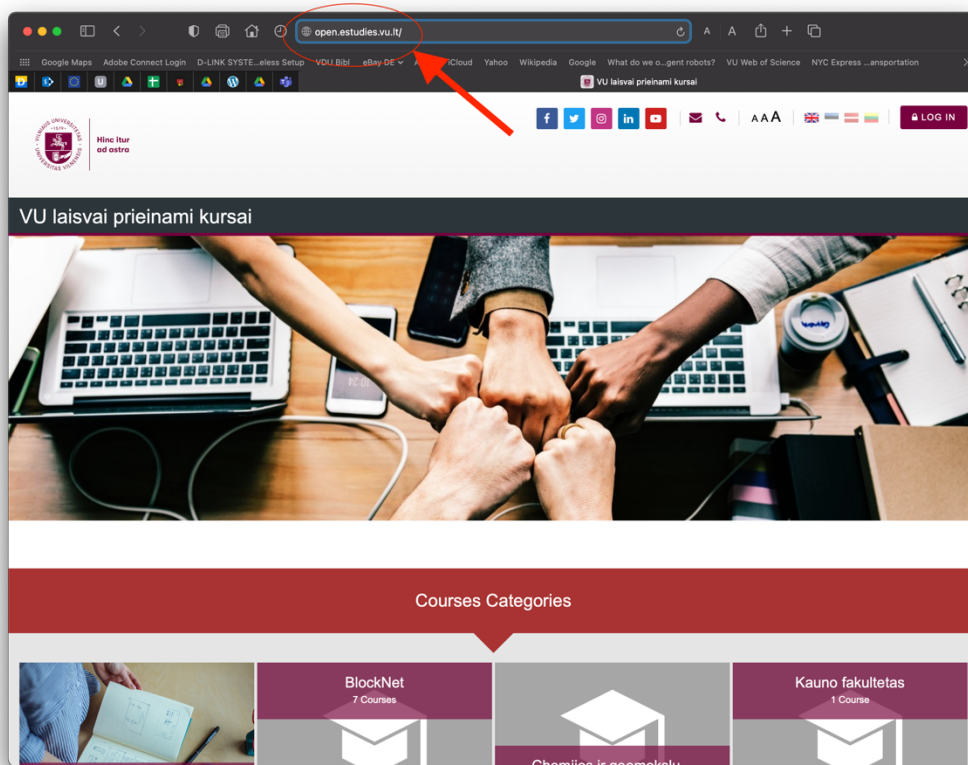
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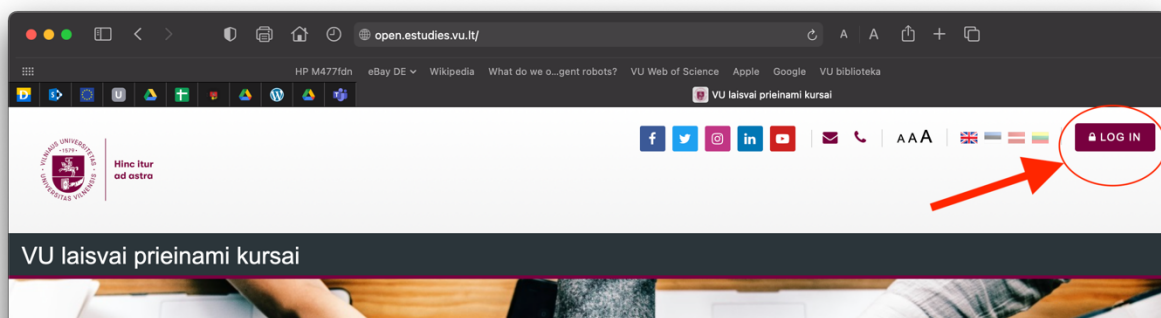
## Practical guide to access and use the BlockNet Online Course

1. Enter the URL for the Learning Platform in Internet Browser:

[Open.eStudies.VU.lt](https://open.estudies.vu.lt)



2. Log-in to the Portal by clicking on the “Log in” button at the upper right corner of the screen



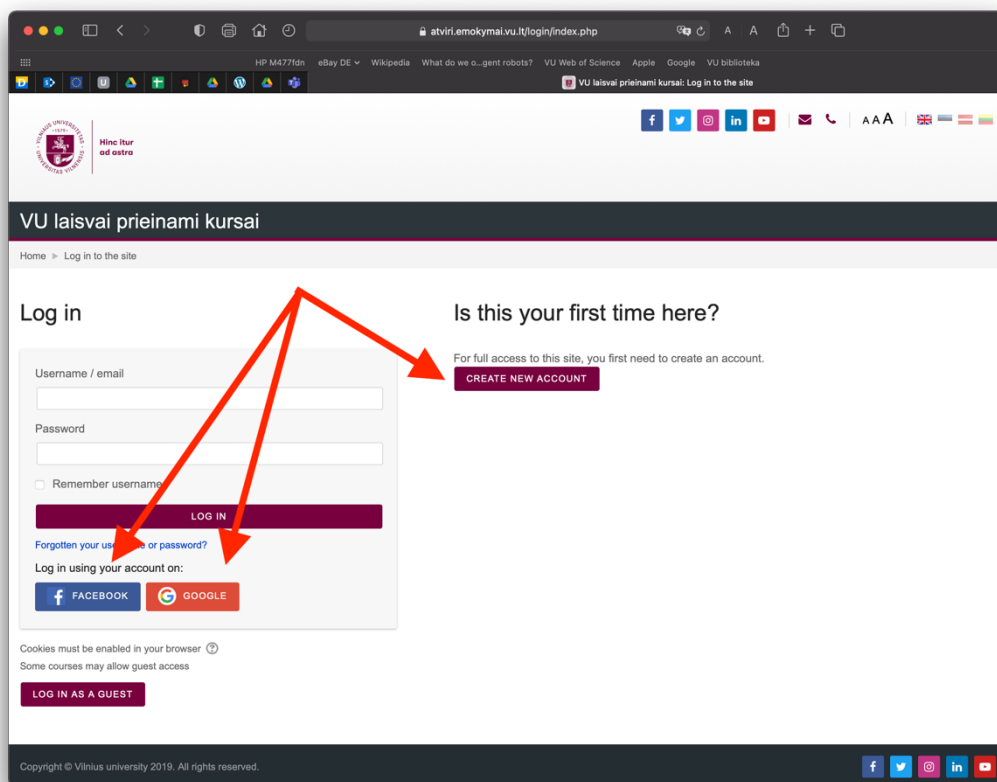
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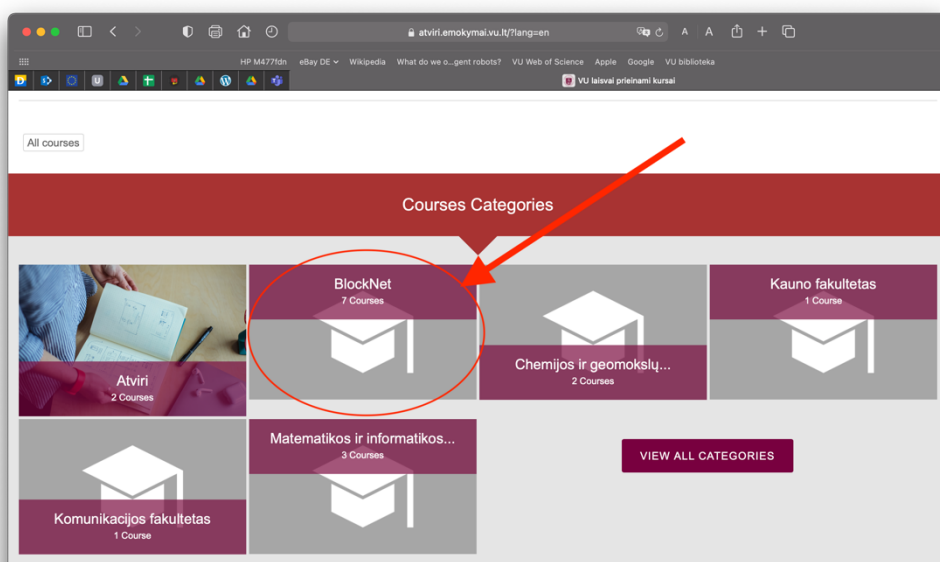
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3. Choose the preferred login option and use the same login option each time you return to the Portal. There is **no need** for creating a new account if you are using Facebook or Google credentials to log in. **SIMPLY CLICK ON “FACEBOOK” OR “GOOGLE” BUTTON TO LOG IN TO THE PORTAL FOR THE FIRST (AND THE CONSECUTIVE) TIME(S).**



4. Having logged in to the Portal, choose “BlockNet” from the list of available courses







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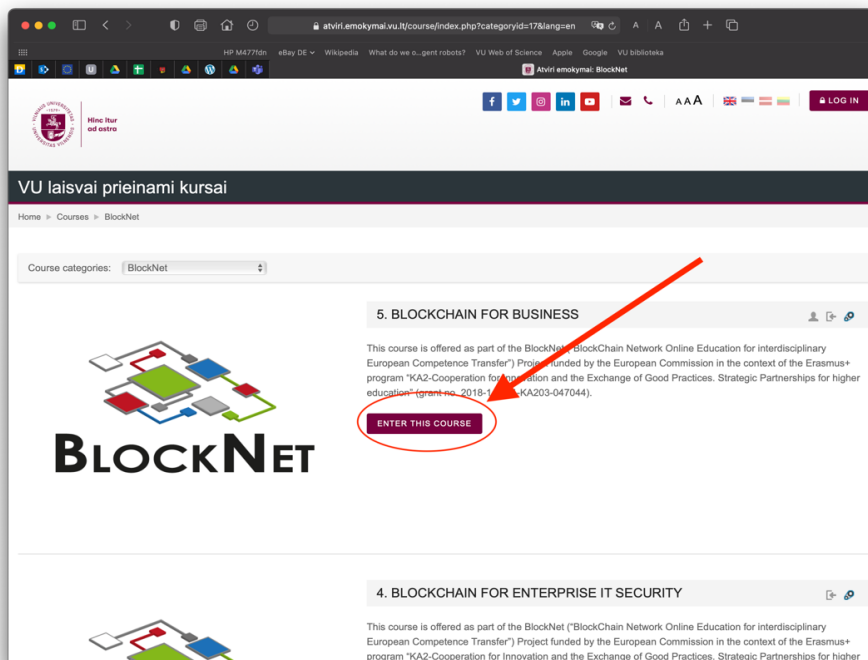
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5. Use the course map to aid your navigation. Each group of topics (IT Security, Business, Logistics and Supply Chain Management, and Computer Science) features one 2 ECTS **advanced level** course. As 1 ECTS requires between 25 to 30 hours of work from a student, the lecture recordings are supplemented by reading materials, videos, podcasts and quizzes to create a meaningful workload in accordance with the study goals and requirements.

| BlockChain Network Online Education for Interdisciplinary European Competence Transfer   |   |   |   |  |
|--|---|---|---|--|
| BCT-BASICS   | IT-SECURITY   | BUSINESS  | SUPPLY CHAIN MANAGEMENT   | COMPUTER SCIENCE   |
| <b>1. BLOCKCHAIN (5+1+1 ECTS)</b><br><b>5. INTRODUCTION IN BLOCKCHAIN APPLICATION (5 ECTS)</b><br>1. Introduction to distributed ledger technologies and properties (2h)<br>2. Business development (1h)<br>3. Digital entrepreneurship (30 min)<br>4. Introduction to cryptography (2h)<br>5. Introduction to information systems for blockchain and challenges (2h)<br>6. Business processes (2h)<br>7. Business requirement & specification (2h)<br>8. Blockchain-enabled supply chain processes (4h)<br>9. Cryptocurrencies (2h)<br>10. Tokenization (1h)<br>11. Token-based exchange mechanisms (1h)<br><b>1b INTRODUCTION IN BLOCKCHAIN-ENABLED BUSINESS PROCESSES</b><br>1. Blockchain for various industries (4h)<br><b>1c INTRODUCTION IN BLOCKCHAIN AND APPLICATIONS DEVELOPMENT</b><br>1. Introduction to platform and application development (1h)<br>2. Programming models (1h)<br>3. Smart contract programming (2h) | <b>4. BLOCKCHAIN FOR ENTERPRISE IT SECURITY (2 ECTS)</b><br><b>1</b><br>1. Security design for distributed information systems (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>2</b><br>2. Cryptographical methods (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>3</b><br>3. Blockchain components and security methods (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>4</b><br>4. Secure platforms, tools and Enterprise models (2h) | <b>5. BLOCKCHAIN FOR BUSINESS (2 ECST)</b><br><b>1</b><br>1. Business activities & processes (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>2</b><br>1. Innovation management using information systems (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>3</b><br>3. Blockchain components and security methods (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>4</b><br>4. Blockchain business transformation (1h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>5</b><br>5. Blockchain-enabled business processes (1h) | <b>3. BLOCKCHAIN FOR LOGISTICS &amp; SUPPLY CHAIN MANAGEMENT (2 ECTS)</b><br><b>1</b><br>1. Supply chain management and processes (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>2</b><br>2. Information Systems in SCM and Blockchain Framework (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>3</b><br>3. Blockchain Use Cases and Projects (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>4</b><br>4. Business Value of Blockchain Solutions (2 h) | <b>2. BLOCKCHAIN FOUNDATIONS &amp; DEVELOPMENT (2 ECTS)</b><br><b>1</b><br>1. Introduction to cryptography (2h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>2</b><br>2. Introduction to distributed computing (1 h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>3</b><br>3. Introduction to information systems (1h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>4</b><br>4. Blockchain components and systems development (1h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>5</b><br>5. Blockchain platforms (1h)<br><b>E</b><br><b>C</b><br><b>T</b><br><b>S</b><br><b>6</b><br>6. Blockchain programming models (2h) |
|  | <br>TARTU ÜLIKOOL<br>UNIVERSITAS TARTUENSIS<br>1632  | <br>VILNAUS UNIVERSITETAS<br>UNIVERSITAS VILNENSIS<br>1579   | <br>tu technische universität dortmund  | <br>SICCARDIANA UNIVERSITATIS   |

6. Scroll the BlockNet courses space to choose the desired course and enter it by clicking on “Enter this course” button under the name of the course



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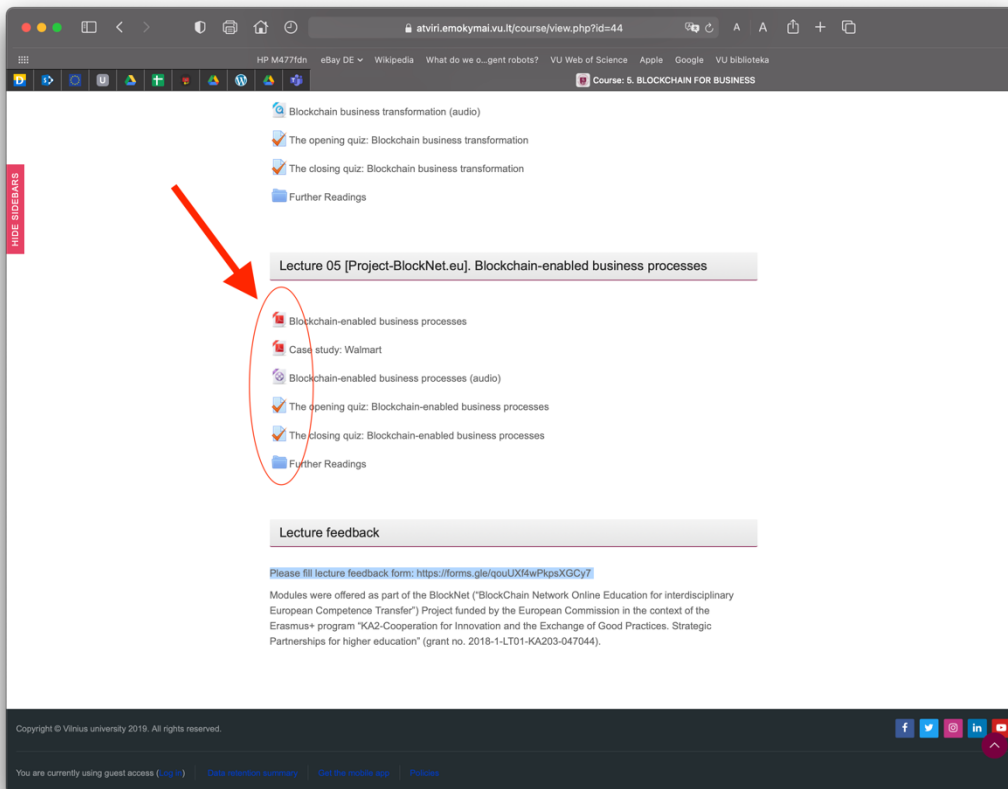
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7. Navigate through the course materials: lecture slides (PDF), lecture voice-over recording (lecturer's narration for the lecture slides), additional video and audio materials, and quizzes.

**NB:** It is a good idea to start with the lecture slides in PDF format, get yourself familiar with the module's Learning Goals, which are always stated in one of the first lecture slides in each module, and with the overall structure of the module. Next follow the voice-over lecture recording to listen to either the whole lecture or only the specific parts of its to suit your personal interests and needs. Follow the instructions for compulsory assignments and readings. Finally, see the Further Reading folder for complementary literature.



8. Having completed the course, fill out the evaluation form, the URL for which you can find at the bottom of each module's space in the Portal.

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 The closing quiz: Blockchain-enabled business processes

 Further Readings

### Lecture feedback

Please fill lecture feedback form: <https://forms.gle/qouUXf4wPkpsXGCy7>

Modules were offered as part of the BlockNet ("BlockChain Network Online Education for interdisciplinary European Competence Transfer") Project funded by the European Commission in the context of the Erasmus+ program "KA2-Cooperation for Innovation and the Exchange of Good Practices. Strategic Partnerships for higher education" (grant no. 2018-1-LT01-KA203-047044).

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