



**OST**

Eastern Switzerland  
University of Applied Sciences

# Blockchain (BlCh)

## Admin

Thomas Bocek

30.09.2021

# BlCh 2021: Plan

| Nr | Date       | Lecture*                                                           | Lecturer |
|----|------------|--------------------------------------------------------------------|----------|
| 01 | 24.09.2021 | Admin, Challenge Task, Repetition DS1 (part 1)                     | Bocek    |
| 02 | 01.10.2021 | NFT Introduction, Repetition DS1 (part 2)                          | Bocek    |
| 03 | 08.10.2021 | Ethereum and Solidity                                              | Bocek    |
| 04 | 15.10.2021 | NFT Details and DeFi                                               | Bocek    |
| 05 | 22.10.2021 | P2P and DHTs                                                       | Bocek    |
| 06 | 29.10.2021 | Algorithms for Distributed Systems                                 | Bocek    |
| 07 | 05.11.2021 | Crypto Mining, PoW, PoS                                            | Bocek    |
| 08 | 12.11.2021 | WebRTC, Applied Cryptography                                       | Bocek    |
| 09 | 19.11.2021 | Layer 2 Solutions                                                  | Bocek    |
| 10 | 26.11.2021 | HTLCs, Cross-chain Atomic Swaps                                    | Bocek    |
| 11 | 03.12.2021 | NEO guest lecture                                                  | Machado  |
| 12 | 10.12.2021 | Exam preparation, guest lecture 2                                  | Bocek    |
| 13 | 17.12.2021 | Challenge Task Presentations                                       | you      |
| 14 | 24.12.2021 | Challenge Task Award Winner Announcement, Q&A (from 08:10 – 09:50) | you      |
| 15 | 14.01.2022 | Beratungswoche                                                     | Bocek    |

# BlCh Exercises

- Challenge Task
  - Starts 01.10.2021 (lecture 2)
- Finalize group forming
  - Idea discussion, setup dev environment
- Requirements
  - A working prototype
  - Use latest stable releases of chosen libraries and frameworks
  - An NFT stored on a public blockchain (can be testnet)
  - Transfer of an NFT triggered directly or indirectly via the frontend (can be testnet)

- Online: via MS Teams
  - Friday exercise u11: 10:10 – 11:50
  - Friday exercise u12: 13:10 – 14:50
  - Friday exercise u13: 15:10 – 16:50
- Drop in at any time!

| Nr | Name 1      | Name 2    | Name 3     | Project           | Source | Slides | Video |
|----|-------------|-----------|------------|-------------------|--------|--------|-------|
| 1  | Julia F.    | David K.  | -          |                   |        |        |       |
| 2  | Zvonimir S. | Siman C.  | -          |                   |        |        |       |
| 3  | Michel M.   | Benny V.  | Moritz S.  | NFT Reddit        |        |        |       |
| 4  | Samuel L.   | Tim W.    | -          |                   |        |        |       |
| 5  | Andy P.     | Pascal K. | -          | Image Auction NFT |        |        |       |
| 6  | Ruwen F.    | Igor C.   | -          |                   |        |        |       |
| 7  | Severin G.  | Marco M.  | Severin A. |                   |        |        |       |

# BICH 2021: Plan

| Nr | Date       | Lecture*                                               | Suggested Milestone                                                               |
|----|------------|--------------------------------------------------------|-----------------------------------------------------------------------------------|
| 01 | 24.09.2021 | Admin, Challenge Task, Repetition DS1 (part 1)         | Group forming, idea for (d)app                                                    |
| 02 | 01.10.2021 | NFT Introduction, Repetition DS1 (part 2)              | Setup dev environment                                                             |
| 03 | 08.10.2021 | Ethereum and Solidity                                  | Information flow                                                                  |
| 04 | 15.10.2021 | NFT Details and DeFi                                   | Bocek                                                                             |
| 05 | 22.10.2021 | P2P and DHTs                                           | Bocek                                                                             |
| 06 | 29.10.2021 | Algorithms for Distributed Systems                     | Bocek                                                                             |
| 07 | 05.11.2021 | Crypto Mining, PoW, PoS                                | <b>Hand-in 1 (04.11.2021, 23:59 CET)</b> , first versions of frontend/backend NFT |
| 08 | 12.11.2021 | WebRTC, Applied Cryptography                           | Bocek                                                                             |
| 09 | 19.11.2021 | Layer 2 Solutions                                      | Bocek                                                                             |
| 10 | 26.11.2021 | HTLCs, Cross-chain Atomic Swaps                        | Bocek                                                                             |
| 11 | 03.12.2021 | NEO guest lecture                                      | Connecting everything                                                             |
| 12 | 10.12.2021 | Exam preparation, guest lecture 2                      | Testing, testing, testing                                                         |
| 13 | 17.12.2021 | Challenge Task Presentations                           | <b>Hand-in 2 (16.12.2021, 23:59 CET)</b>                                          |
| 14 | 24.12.2021 | CT Award Winner Announcement, Q&A (from 08:10 – 09:50) | you                                                                               |
| 15 | 14.01.2022 | Beratungswoche                                         | Bocek                                                                             |