

**DES-2025: schoolschedule. The schedule is currently being formed. Stay tuned for changes and additions.**

| <b>Monday, January 20</b>    |  |   |  |
|------------------------------|--|---|--|
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |
| 9:00-10:00                   | School opening ceremony  |   |  |
| 10:00-11:20                  | What "Generative AI" impacts on the real Enterprise? Vasyl Liashkevych. LNU. Head of GenAI R&D Lab, Manager, Data Science Consulting at EPAM Systems.  | "Leadership in IT" Jan van Zwieten. Rector of the Netherlands Business Academy  |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | Project and data management (Git, Data Version Control (DVC), Data sources (Kaggle, etc.), ML Hubs (Hugging Face, etc.)). Iryna Mysiuk. LNU. Senior Software Test Automation Engineer, EPAM                  | DevSecOps: Security by Design. Maciej Kisielewicz. Senior Security Engineer at Opera Software & PhD candidate at WUST               |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | Database basics, relational, non-relational, distributed databases, data warehouse, ETL, Data Workflows. Maksym Yakubovych. LNU. Engineering Manager   |   |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | Database usage for Data Science, Data Analysis and Machine Learning. Yurii Tsudzenko. LNU. Data Quality Engineer, Node.js Developer, DevOps  |   |  |
| 17:00-18:00                  | <b>Organization of the project competition. Oleh Buhrii. Faculty of Mechanics and Mathematics.</b>   |   |  |
| <b>Tuesday, January 21</b>   |  |   |  |
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |
| 9:20-10:00                   | Dmitry Kulieshov, Head of automation and technical support department. Municipal non-profit enterprise «Lviv Territorial Medical Union «Multidisciplinary Clinical Hospital of Emergency and Intensive Care» |   |  |
| 10:00-11:20                  | "Probability in Real Life", Iryna Bazylevych, Associate Professor, LNU   | "Big Data in AWS ", Yurii Levi, Senior Data Engineer at N-iX  |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | "Statistics in Real Life", Oksana Yarova, Associate Professor, LNU   | Компанія Avenga Зіневич Олександр Юрійович. NodeJS Engineering Director. How to tame a dragon, or leadership with imposter syndrome |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | "Data visualization", Taras Lysetskyi, Assistant Professor, LNU  | "Data Analysis Life Cycle (акцент на processing and visualization)", Sofiia Zavhorodnia at Miratech                                 |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | "Bayesian Data Analysis", Oleh Buhrii, Professor, LNU  | How AI Code Generation works. Copilot. Roman Mysiuk. LNU, Epam systems  | Join Lviv Regional Junior Academy of Sciences and start your journey to IT success.Oksana Storozh. Educational Manager of Lviv Regional Junior Academy of Sciences.  |
| 17:00-18:00                  | <b>Work in groups on projects</b>  |   |  |
| <b>Wednesday, January 22</b> |  |   |  |
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |
| 10:00-11:20                  | Reverse Engineering: Tasks and Tools. Mykola Shcherbyna. LNU, Private Entrepreneur (R&D)   | "Machine learning, deep learning, neural networks" Vitalii Miroshnychenko GlobalLogic   |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | CSOC(Cyber Security Operations Center): myths vs. reality. Roman Karpiuk, LNU  | "LLM fine-tuning techniques (акцент на RAG i GenAI agents)", Oleh Matskula. Head of Development at Profisea                         |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | Languages and Automata. Oleh Gutik, LNU  | "Hierarchical Clustering Algorithms in Machine Learning and Data Science", Olena Kot at Tietoevry                                   |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | Algebraic Codes. Oleh Gutik, LNU   |   | How to understand the impact of "Generative AI" on Business ? Vasyl Liashkevych. Faculty of Electronics and Computer Technologies. LNU. Head of GenAI R&D Lab, Manager, Data Science Consulting at EPAM Systems. |
| 17:00-18:00                  | <b>Work in groups on projects</b>  |   |  |
| <b>Thursday, January 23</b>  |  |   |  |
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |

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| 10:00-11:20                  | ML and DL basics, supervised, reinforcement and unsupervised learning. Vitalii Pretsel. LNU. Software Engineer at Leobit               | Introduction to modern cryptography - where academia meets applied solutions. Maksymilian Górski. Master's student in Cybersecurity at the Wrocław University of Science and Technology (WUST)          |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | Neural networks. Transformers. Building models with Keras and PyTorch. Ivan Bulka, LNU. Senior Data Scientist / Deep Learning Engineer |   |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | CV, CV tasks, CV Libraries and frameworks (e.g. OpenCV)", Vitaliy Vlasov, Associate Professor, LNU                                     | Microsoft programs. Cristian Popa. Microsoft. Future Skills Development Manager   |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | NLP, NLP tasks, NLP libraries and frameworks (e.g. NLTK). Ihor Drozdov. LNU. Lead .Net Engineer  | Problem solving and creativity. Dmytro Nosach GlobalLogic   | How to stay safe on the Internet ? Yuriy Kuzbit, LNU, Head of R&D at Wizer Inc.  |
| 17:00-18:00                  | <b>Work in groups on projects</b>  |   |  |
| <b>Friday, January 24</b>    |  |   |  |
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |
| 10:00-11:20                  | "Eigen decomposition, singular decomposition and their applications", Oleh Romaniv, Associate Professor, LNU                           | Version Control Systems: Git, Data Version Control (DVC), etc. Group 1 Hanna Likhtman GlobalLogic   |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | "Eigen decomposition and singular decomposition in practice", Andrii Sagan, Associate Professor, LNU                                   | "Bringing AI ideas and systems to production" - Martin Braun, Artem Shelamanov, NeuroForge  |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | "Sports simulating using Markov chains", Ihor Kutsevol, Postgraduate student, LNU, Middle Data Scientist, EveryMatrix                  |   |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | "Decision making. How to make better choices in life and work", Marta Maloid-Glebova, Associate Professor, LNU                         | AI Agents in the Cloud. Oleh Chaplia, Senior Software Developer, ELEKS.   | Introduction to Probability. Kostiantyn Zhernovyi. Associate Professor, Faculty of Mechanics and Mathematics, LNU                |
| 17:00-18:00                  | <b>Work in groups on projects</b>  |   |  |
| <b>Monday, January 27</b>    |  |   |  |
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |
| 10:00-11:20                  | Building effective Product Security Operations Center (PSOC). Mychael Kropyvva, LNU  | "Modern Data Architectures", Marian Faryna - Big Data Competence Lead at Sigma Software Group   |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | Modular Arithmetics and its Applications. Olya Popadiuk, LNU   | Relational, non-relational, distributed databases in modern software. (Key-Value, Column-based, Document-based, Graph databases). Oleh Husak, LNU, Senior .NET Software Engineer CUCollaborate, Indeema |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | Cryptography methods overview and application. Valeriy Trushevskyy, LNU  |   |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | The Hill Cipher. Oleh Gutik, LNU   |   | Educational programs of the Faculty of Electronics and Computer Technologies. Iryna Kofliuk. Deputy Dean of the Faculty.         |
| 17:00-18:00                  | <b>Presentation of projects. Oleh Buhrii. Faculty of Mechanics and Mathematics.</b>  |   |  |
| <b>Tuesday, January 28</b>   |  |   |  |
|                              | <b>Core A</b>  | <b>Core B</b>   | <b>Core C (for schoolchildren)</b>   |
| 10:00-11:20                  | Cloud computing basics, SaaS, PaaS and IaaS. Markiy Fostiak. LNU. Software Engineering Lead  | LLM Security and Observability. Danyil Zhuravchak, LNU, Location Head of Operational Intelligence Practice @ EPAM Ukraine.  |  |
| 11:20-11:40                  | Break  |   |  |
| 11:40-13:00                  | Amazon Web Services and Big Data in AWS. Oleh Sihunov. LNU. Java Software Engineer   | "Microsoft Azure 101", Oleh Zarevych at Intellias   |  |
| 13:00-14:00                  | Break  |   |  |
| 14:00-15:20                  | Google Cloud Platform Review. Ihor Rohatskyi. LNU. Engineering Director, GlobalLogic   | Startups Under the Wings of Uncertainty: How a Pilot Finds a Target Where It's Almost Invisible. Ihor Katernyak. LNU  |  |
| 15:20-15:40                  | Break  |   |  |
| 15:40-17:00                  | MS Azure and Big Data in Azure. Oleh Dutsiak. LNU. Senior Software Engineer  | "Why are soft skills critical for techies?" Taras Romanyk, Competency Manager(.NET) ELEKS   | Oleh Buhrii. Head of the Department of Mathematical Statistics and Differential Equations. Faculty of Mechanics and Mathematics. |
| 17:00-18:00                  | <b>Work in groups on projects</b>  |   |  |
| <b>Wednesday, January 29</b> |  |   |  |

|                             | <b>Core A</b>  | <b>Core B</b>  | <b>Core C (for schoolchildren)</b>   |
|-----------------------------|--|--|--|
| 10:00-11:20                 | "Classical regression analysis", Oksana Holovata, Associate Professor, LNU   | Anatoliy Pylypchuk, Senior Java Developer at Kindgeek  |  |
| 11:20-11:40                 | Break  |  |  |
| 11:40-13:00                 | "Examples of using logistic regression", Oksana Holovata, Associate Professor, LNU   | "Headway Autopark and How Being Open About Failures Moves Us Forward", Maksym Sabadyshyn Engineering Manager at Headway                        |  |
| 13:00-14:00                 | Break  |  |  |
| 14:00-15:20                 | "Life on the command line: How text-based interfaces can improve data processing", Vitaliy Vlasov, Associate Professor, LNU        | "Usage of AI in modern services, applications, platforms", Andriy Bilous, CEO StayInno   |  |
| 15:20-15:40                 | Break  |  |  |
| 15:40-17:00                 | "Introduction to zero-knowledge proofs", Vitaliy Vlasov, Associate Professor, LNU  | "Radical Directness: How to achieve results faster thanks to a feedback culture in the team?" Mariana Boloban Head of People Headway           | About career guidance, how to choose the right one. Yevhen Hirnyi, Lviv IT Cluster.  |
| 17:00-18:00                 | <b>Work in groups on projects</b>  |  |  |
| <b>Thursday, January 30</b> |  |  |  |
|                             | <b>Core A</b>  | <b>Core B</b>  | <b>Core C (for schoolchildren)</b>   |
| 10:00-11:20                 | The Power of Effective Teamwork. Mykhailo Viachalo, LNU  | "Behind the Scenes: How Background Workers Keep Your Apps Running (While You Sleep)" - Yaroslav Andreiev, Middle Full Stack Developer at DevsX |  |
| 11:20-11:40                 | Break  |  |  |
| 11:40-13:00                 | Basics of cyber hygiene in everyday life. Yuriy Kuzbyt, LNU  | Data in Motion: Mastering Real-Time Processing with Kafka and Flink. Oleh Shchur at Intellias  |  |
| 13:00-14:00                 | Break  |  |  |
| 14:00-15:20                 | Secure Coding. Sviatoslav Zlatous. LNU   | "Swizzling in Swift", Olena Zola SoftServe   |  |
| 15:20-15:40                 | Переєва  |  |  |
| 15:40-17:00                 | Game developer as a full-time job. Oleksandr Terletskyy, LNU   | Exploring Penetration Testing: Techniques, Tools, and Trends. Igor Beliaiev, LNU, Head of Security @ EPAM Ukraine.                             | About cybersecurity educational programs at Lviv University. Why is it important to study cybersecurity and data protection? Petro Venherskyi, LNU, Head of department CyberSecurity |
| 17:00-18:00                 | <b>Work in groups on projects</b>  |  |  |
| <b>Friday, January 31</b>   |  |  |  |
|                             | <b>Core A</b>  | <b>Core B</b>  | <b>Core C (for schoolchildren)</b>   |
| 10:00-11:20                 | Generative models basics. Oleh Yatskiv. LNU. Engineering Manager at Nexla  | Version Control Systems: Git, Data Version Control (DVC), etc. Group 2 Hanna Likhtman GlobalLogic  |  |
| 11:20-11:40                 | Break  |  |  |
| 11:40-13:00                 | LLM, Transformers, BERT, GPT models family, LLM fine-tuning techniques. Mykola Stasiuk. LNU, Senior Software Engineer. GlobalLogic | "Security in Mobile World" Andriy Flinta, Mobile Engineering Lead at Intellias   |  |
| 13:00-14:00                 | Break  |  |  |
| 14:00-15:20                 | <b>Defense of team projects</b>  |  |  |
| 15:20-15:40                 | Break  |  |  |
| 15:40-17:00                 | <b>Defense of team projects</b>  |  |  |
| 17:00-18:00                 | <b>School closing ceremony</b>   |  |  |