



# MDEM shares expertise with University students

It is well-known that the MDEM team has acknowledged Damen values and implements them creating the company culture. That is to say we put high priority to the personnel development arranging the trainings and improving the skills of our employees. And even more - we contribute to the educational process of the national universities raising the professional level of the future employees of Ukrainian and European companies.

For the past years MDEM has elaborated the fruitful cooperation and established collaborative partnership with Admiral Makarov National University of Shipbuilding (NUS) which is the leading shipbuilding university in our country. Our company is participating in scientific and educational initiatives, research investigations, and dual educational programs covering large variety of disciplines and training courses. At this moment a pretty big number of MDEM employees are earning their Masters and PhD degrees at NUS.

Realizing the planning of interaction with NUS the MDEM experts have created and conducted a series of guest lectures for students of NUS. Following the request of the NUS Institute of Automatics and Electrical Engineering

and the Faculty of Marine Economy, our colleagues have already conducted several lectures last year. Stanislav Seleznev, Head of the Engineering Services Department MDEM (DWR location), gave an insight for the topics like "Requirements of the Class for high-voltage ship power generation," "High-voltage ship electrical power stations," and "Practical approach of working with high-voltage power tools."

Additionally, Nataliia Nitsuliak (Head of Digital services Department) made a presentation of HR marketing in MDEM activities, while Oksana Petrova (Senior Content Manager of Digital services Department) discussed improvement of the safety conditions for the personnel at the shipyards

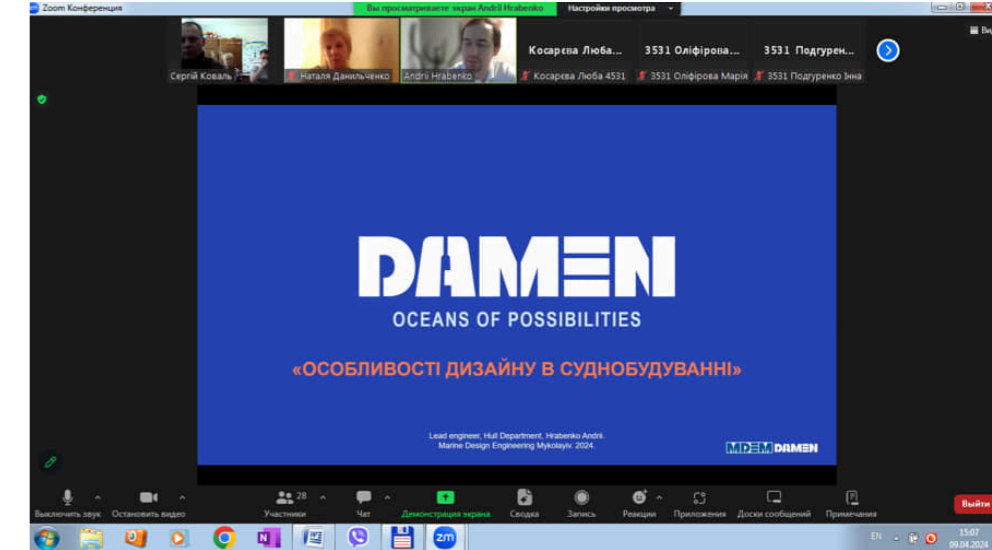
using digital channels and technologies.

And recently Andrii Hrabenko (Lead Engineer Hull) and Maksym Koba (Manager Resources Engineering) conducted a lecture for students following the request of the NUS Design department. The topic of their presentation was "Design specs in shipbuilding." The event was also attended by students of Kherson National Technical University and Kyiv National University of Technology and Design. The speakers made an overview of the modern trends in shipbuilding, including the implementation of innovative materials, energy efficiency, environmental sustainability, automation, and digitalization, providing focus on Industry 4.0 technologies.

During the presentation Andrii has dived deeper into the external and internal design particulars having impact on the main specifications of the vessel, highlighted the importance of transition to green energy technologies and specific features of the full electrical and hybrid vessels with the innovative design solutions. A significant part of the presentation was dedicated to the design specs of various types of vessels. The MDEM experts also figured out the trends for designing ships of the future and answered the questions of students about Damen and MDEM career prospects.

The next day Yevhen Katvaliuk (Infrastructure manager), having accepted the invitation of the Intellectual Digital Economy department, delivered a guest lecture on the theoretical and practical aspects of signing and executing contracts.

We have no doubts that the synergy of the well-prepared lectures, the highly experienced MDEM trainers, and the genuine interest of the students will create the fertile ground for growing up the future specialists in the shipbuilding industry and not only for Ukraine, but for Damen and all over the world. <<



**Автоматизація та цифровізація:** Суднобудівні компанії інтегрують у свої процеси все більше автоматизації та цифрових технологій, таких як використання безпілотних суден, системи управління кораблем, дистанційне моніторинг та аналітика для підвищення ефективності та безпеки операцій.

На даний час дуже активно розвиваються Product Lifecycle Management (PLM / ПЛМ) системи. Вони охоплюють абсолютно всі етапи життєвого циклу судна, від Ідеї та Ескізів – до повної утилізації судна.

Зазвичай ПЛМ системи мають в собі майже всі необхідні програмні інструменти для кожної вирішуваної задачі. Якщо чогось не вистачає, то існує зворотній зв'язок між файлами та форматами з іншим програмним забезпеченням.

СТАН СПРАВ У СУЧАСНОМУ СУДНОБУДУВАННІ

**Енергоефективність та екологічна стійкість:** Будівництво суден зосереджено на покращенні енергоефективності та зниженні викидів для дотримання суворіших екологічних стандартів. Це включає використання ефективних двигунів, поліпшених систем обробки відходів і розробку альтернативних джерел енергії, таких як сонячні і вітряні установки.

Електрифіковане судно з сонячними панелями-вітрилами

Сонячні панелі на прогулянковій яхті

Вантажне судно з роторними генераторами (турбо-стрілами) працюють на ефект Магнуса.

СТАН СПРАВ У СУЧАСНОМУ СУДНОБУДУВАННІ

