

Școala Doctorală de Inginerie Mecanică și Mecatronică

Lista temelor de doctorat propuse pentru anul universitar 2026/2027

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Nr. Crt.	Tema de doctorat propusă
1	Optimizarea proiectării și analiza mecanică a structurilor navale prin integrarea tehnologiilor digitale (Notă: poate prezenta interes optimizarea diferitelor structuri navale supuse la solicitări puternice, prin modificarea geometriei și/sau a tehnologiei de construcție) -
2	Integrarea tehnologiilor digitale în analiza și optimizarea structurală a planșeelor de punte (Notă: pot prezenta interes soluții de îmbunătățire a structurii planșeelor de punte ale portcontainerelor afectate de căderea accidentală a unui container scăpat din cârligul de macara sau care se desprinde accidental din sistemele de legare)
3	Utilizarea soluțiilor software inteligente în proiectarea carenelor navale (Notă: cu geometrie clasică sau neconvențională, pentru nave de suprafață sau platforme semisubmersibile) -
4	Contribuții privind integrarea soluțiilor software inteligente în studiul comportamentului dinamic al navelor în condiții de navigație în proximitatea unor obstacole (Notă: analiza comportamentului în proximitatea platformelor de foraj marin, a pereților canalului de navigație sau a danelor de operare (obstacole fixe) sau în proximitatea navelor avariate în derivă sau a minelor plutitoare (obstacole mobile))

Doctoral School of Mechanical and Mechatronics Engineering

List of proposed doctoral theses for the academic year 2026/2027

Nr. Crt.	Tema de doctorat propusă
1	Optimization of ship structural design and mechanical analysis through the integration of digital technologies (Note: particular interest may be given to the optimization of various ship structures subjected to severe loading conditions by modifying their geometry and/or construction technology).
2	Integration of digital technologies for the structural analysis and optimization of ship's deck panels (Note: particular interest may be given to solutions that enhance the structural performance of container ship deck structures affected by the accidental fall of a container dropped from the crane hook or accidental released from their lashing systems.)
3	Intelligent software solutions for ship hull design (Note: covering conventional or unconventional hull geometries for surface vessels or semi-submersible platforms).
4	Contributions to the integration of intelligent software solutions in the study of the dynamic behavior of ships navigating in the vicinity of obstacles (Note: analysis of ship behavior in the vicinity of offshore drilling platforms, navigation channel walls, or operating berths (fixed obstacles), as well as in the vicinity of drifting damaged vessels or floating naval mines (mobile obstacles)).

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