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| Naziv kolegija | DINAMIKA OBJEKATA MORSKE TEHNIKE |
| Ime i prezime nastavnika | Ivan Čatipović |
| Sadržaj kolegija | <p>Temelji numeričkog modeliranja interaktivnog djelovanja pučinskih objekata morske tehnike i morskih valova:</p> <ul style="list-style-type: none"> - valna radijacija - difrakcija valova. <p>Njihanje plovniha i pučinskih objekata na morskim valovima. Sidrenje i pozicioniranje pučinskih objekata. Hidrodinamička reakcija i uzbuda kod njihanja objekata morske tehnike na valovima. Hidrodinamičke sile 1. i 2. reda.</p> |
| Opće i specifične kompetencije koje daje kolegij | Upoznavanje problema njihanja pučinskih objekata na morskim valovima i metode analize pojava. |
| Oblici provođenja nastave | Predavanja s izvodima osnovnih konstitutivnih jednadžbi. |
| Osnovna literatura | 1. Journée, J.M.J.: Massie, W.W.: Offshore Hydrodynamics; Delft University of Technology 2001 |
| Dopunska literatura | <p>1. Zienkiewicz, O.C.: Lewis, R.W.; Stagg, K.G. (editors): Numerical methods in offshore engineering; John Wiley & Sons; Chichester 1978</p> <p>2. Sarpkaya, T.: Isaacson, M.: Mechanics of wave forces on offshore structures; Van Nostrand Reinhold Company; 1981</p> <p>3. Faltinsen, O.M.: Sea Loads on Ships and Offshore Structures; Cambridge University Press; Cambridge 1990</p> |
| Način polaganja ispita | Izrada seminara i usmeni ispit. |
| Popis radova (do 5 radova) koji nastavnika (nastavnike) kvalificiraju za izvođenje nastave iz kolegija | <p>1. I. Čatipović, N. Degiuli, A. Werner, V. Čorić, J. Radanović: Approximation of Towline Influence on Towed Ship Motions; Proceedings of the 2nd International Conference on Maritime Technology and Engineering; MARTECH 2014; Lisbon, Portugal, 2014.</p> <p>2. I. Čatipović, V. Čorić, V. Vukčević: Dynamics of FPSO with Polyester Mooring Lines; Proceedings of the Twenty-second International Offshore and Polar Engineering Conference; Rhodes, Greece, 2012.</p> <p>3. I. Čatipović, V. Čorić, J. Radanović: An Improved Stiffness Model for Polyester Mooring Lines; Shipbuilding: Journal of Naval Architecture and Ship Building Industry 62 (2011), vol. 3; pp 235-248.</p> <p>4. I. Čatipović, V. Čorić, D. Veić: Calculation of Floating Crane Natural Frequencies Based on Linearized Multybody Dynamics; Proceedings of the 30th International Conference on Ocean, Offshore and Arctic Engineering; OMAE 2011-49303; Rotterdam, The Netherlands, 2011.</p> <p>5. I. Senjanović, I. Čatipović, S. Tomašević: Coupled Horizontal and Torsional Vibrations of a Flexible Barge; Engineering Structures 30 (2008), vol. 1, pp 93 – 109.</p> |