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| Name of teacher: | Davor Grandić |
| Employed at: Since: | University of Rijeka, Faculty of Civil Engineering 11 December 2005 - |
| Academic rank: Since: In: | Full Professor 2020 civil engineering, structural engineering, |
| e-mail address, web page | dgrandic@gradri.uniri.hr , https://portal.uniri.hr/Portfelj/Index/1115 |
| Knowledge of foreign languages | English, German |
| Qualifications | <ul style="list-style-type: none"> - date of birth, nationality: 29 January 1967 in Zagreb, Croatian - First degree obtained at: Faculty of Civil Engineering, University of Zagreb - Ph.D. degree obtained at: Faculty of Civil Engineering, University of Zagreb - additional education: - - previous employments: Civil Engineering Institute in Zagreb, (from 1 Sept. 1995 to 10 Dec. 2005) |
| List of papers published in scientific journals | <ol style="list-style-type: none"> 1. Grandić, D.; Bjegović, D.; Radić, J.: „Bearing capacity and serviceability of reinforced-concrete structures affected by steel corrosion“, Građevinar, 52 (2000), 3, Zagreb, pp. 153-161. (in Croatian) 2. Grandić, D.; Sorić, Z.: „Testing semi-prefabricated floors made of prestressed brick elements“, Građevinar, 54 (2002), 12, Zagreb, pp. 705-706. (in Croatian) 3. Šimunić, Ž.; Grandić, D.: „Seismic insulation of buildings with elastomeric bearings“, Građevinar, 55 (2003), 2, Zagreb, pp. 71-78. (in Croatian) 4. Grandić, D.; Bjegović, D.; Zorislav, S.: „Experimental stress-strain diagram of corroded reinforcing-steel bars“, Građevinar, 61 (2009), 2, Zagreb, pp. 157-167. (in Croatian) 5. Grgorinić, N.; Grandić, D.; Šćulac, P.: „Repair of the Torpedo Launch Pad Station Reinforced Concrete Structure in Rijeka“, Zbornik radova Građevinskog fakulteta Sveučilišta u Rijeci, 13 (2010), Rijeka, pp. 169-189. (in Croatian) 6. Mrak, P.; Grandić, D.; Meštrović, D.: „Reinforced-concrete walls in earthquake-prone areas“, Građevinar, 32 (2010), 6, Zagreb, pp. 517-527. (in Croatian) 7. Štimac Grandić, I.; Grandić, D.; Bjelanović, A.: "Comparison of techniques for damage identification based on influence line approach", Machines, technologies, materials 7 (2011) ; pp. 9-13. 8. Štimac Grandić, I.; Grandić, D.; Brezac, G.: "Determination of effective width of a T-beam of ribbed bridge deck transversal girder", e-GFOS, 3 (2011), pp. 39-52 (in Croatian) 9. Smolčić, Ž.; Grandić, D.: "Interaction diagrams for reinforced concrete circular cross-section ", Građevinar, 64 (2012) 1, pp. 23-31. 10. Štimac Grandić, I.; Grandić, D.; Strelec, I.: "Verification and Improvement of the Continuous Ribbed Bridge Deck Grillage Model Based on Field Testing", Tehnički vjesnik – Technical Gazette 19 (2012) 3, pp. 611-616. 11. Štimac Grandić, I.; Grandić, D.; Mužić, R.: "Determination of Bridge Global Dynamic Factor", e-gfos, Elektronički časopis građevinskog fakulteta Osijek, 6 (2013) pp. 23-33. (in Croatian) 12. Štimac Grandić, I.; Jakovljević, D.; Grandić, D.: "Impact of omitting the static component from the design dynamic models of pedestrian load", Elektronički časopis Građevinskog fakulteta Osijek, e-GFOS 9 (2014) ; pp. 11-21. 13. Štimac Grandić, I.; Grandić, D.; Bjelanović, A.: "Evaluation of Torsional Stiffness in Beam and Slab Bridge Decks Based on Load Testing", International Journal of Civil Eng. 13 (2015), 3, pp. 255-266. 14. Štimac Grandić, I.; Grandić, D.; Berić, N.: "Parameters affecting the reduction factor in pedestrian load models based on pulsating stationary force", Journal of Applied Engineering Science 13 (2015) 3, pp. 178-184. 15. Grandić, D.; Šćulac, P.; Štimac Grandić, I.: "Shear resistance of reinforced concrete beams in dependence on concrete strength in compressive struts", Tehnički vjesnik : |

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| | <p>znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku, 22 (2015) 4, pp. 925-934.</p> <ol style="list-style-type: none"> 16. Krolo, P.; Grandić, D.; Bulić, M.: "The Guidelines for Modelling the Preloading Bolts in the Structural Connection Using Finite Element Methods", Journal of Computational Engineering, 2016 (2016), DOI: 10.1155/2016/4724312, 8 pp. 17. Krolo, P.; Grandić, D.; Smolčić, Ž.: "Experimental and Numerical Study of Mild Steel Behaviour under Cyclic Loading with Variable Strain Ranges", Advances in Materials Science and Engineering, 2016 (2016), DOI: 10.1155/2016/7863010, 13 pp. 18. Štimac Grandić, I.; Grandić, D.: "Estimation of Damage Severity Using Sparse Static Measurement", Journal of Civil Engineering and Management, 23 (2017), 2, pp. 213-221. 19. Štimac Grandić, Ivana ; Grandić, Davor: Reduction in wind force in relation to corner design of bridge piers // Engineering review (Technical Faculty University of Rijeka), 40 (2020), 2; 88-100. doi: 10.30765/er.40.2.10 20. Grandić, Davor ; Štimac Grandić, Ivana: Pitting factor in use of galvanostatic pulse method for measuring the corrosion rate of reinforcement in concrete // Machines, Technologies, Materials, 15 (2021), 7; 259-263 21. Krolo, P. ; Grandić, D.: Hysteresis Envelope Model of Double Extended End-Plate Bolted Beam-to-Column Joint // Buildings, 11 (2021), 11; 517, 22. doi: 10.3390/buildings11110517 22. Palijan, Ivan; Grandić, Davor; Štimac Grandić, Ivana; Krolo, Paulina; Lukačević, Lazar; Bakran, Antonio: Testing of Innovative Composite Wall/Ceiling Panel // International Scientific Journal Industry 4.0, VIII (2023), 5; 155-158 23. Smolčić, Željko; Grandić, Davor; Šćulac, Paulo: Dimenzioniranje armiranobetonskih pravokutnih presjeka prema drugoj generaciji Eurokoda // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 75 (2023), 12; 1203-1216. doi: 10.14256/JCE.3855.2023 24. Štimac Grandić, Ivana; Šćulac, Paulo; Grandić, Davor; Vodopija, Iva: The Accessible Design of Pedestrian Bridges // Sustainability, 16 (2024), 3; 1063, 17. doi: 10.3390/su16031063 25. Palijan, Ivan; Krolo, Paulina; Štimac Grandić, Ivana; Grandić, Davor: Testing of the structural composite panels to determine the design resistance models // Machines, Technologies, Materials, 18 (2024), 5; 148-152 26. Grandić, Davor; Štimac Grandić, Ivana; Šćulac, Paulo: Assessment of Mechanical Properties of Corroded Reinforcement in Chloride Environment Based on Corrosion Rate Monitoring // Civil engineering journal (Tehran), 10 (2024), 11; 3473-3492. doi: 10.28991/cej-2024-010-11-02 |
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| <p>List of publications which serve as a proof of teaching qualifications</p> | <ol style="list-style-type: none"> 1. Grandić, D.; Bjegović, D.; Radić, J.: „Grandić, D.; Bjegović, D.; Radić, J.: „Bearing capacity and serviceability of reinforced-concrete structures affected by steel corrosion“, Građevinar, 52 (2000), 3, Zagreb, pp. 153-161. (in Croatian) 2. Šimunić, Ž.; Grandić, D.: „Seismic insulation of buildings with elastomeric bearings“, Građevinar, 55 (2003), 2, Zagreb, pp. 71-78. (in Croatian) 3. Grandić, D.; Bjegović, D.; Banić, D. I.: "Residual Structure Service Life Depending on Steel Corrosion Rate, Global Construction", Dhir, R.K.; Newlands, M. D.; Whyte, A. (ur.), Proceedings of the International Conference held at the University of Dundee: Application of Codes, Design and Regulations, 6th International Congress "Global Construction: ultimate concrete opportunities", Dundee, Škotska, UK, 05-07.06.2005., London: Thomas Telford Publishing, 2005., pp. 195-202. 4. Meštrović, D.; Grandić, D.: "Aseismic strenghtening of masonry buildings", Radić, J.; Rajčić, V.; Žarnić, R. (ur.), Heritage Protection - Constructor Aspects, International Conference Heritage Protection, Dubrovnik 14-17.10.2006., Zagreb: SECON HDGK, 2006., pp. 305-312. 5. Grandić, D.; Bjegović, D.: "Structural Deterioration due to Chloride-Induced Reinforcement Corrosion", Gupta Pawan, Gupta Prabha (ur.), Supplementary Papers - Seventh CANMET/ACI International Conference on Durability of Concrete, Montreal, Kanada, 28.05.-03.06.2006., pp. 173-189. 6. Grandić, D.; Bjegović, D.; Sorić, Z.; Serdar, M.: "Calculating procedures for remaining load bearing capacity and serviceability assessment of corroded reinforced concrete elements", fib (ur.), Concrete: 21st Century Superhero, The 11th Annual International fib |
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| | <p>Symposium, London, Velika Britanija, 22.-24.06.2009., London: Busines Design Centre, 2009., pp. 1-7.</p> <ol style="list-style-type: none"> 7. Grandić, D.; Bjegović, D.; Serdar, M.: "Chloride threshold for different levels of reinforcement corrosion propagation", Kovler, K. (ur.), Concrete Durability and Service Life Planning, 2nd International RILEM Workshop, 2nd International RILEM Workshop, Haifa, Izrael, 07.-09.09.2009., Bagnex, Francuska: RILEM, 2009., pp. 416-422 8. Grandić, D.; Bjegović, D.; Zorislav, S.: „Grandić, D.; Bjegović, D.; Zorislav, S.: „Experimental stress-strain diagram of corroded reinforcing-steel bars“, Građevinar, 61 (2009), 2, Zagreb, pp. 157-167. (in Croatian) 9. Grandić, D.; Bjegović, D.: "Reinforcement Corrosion Rate in Cracked Areas of RC-Members Subjected to Sustained Load", Andrade, C.; Mancini, G. (ur.), Modelling of Corroding Concrete Structures - Proceedings of the Joint fib-RILEM Workshop held in Madrid, Spain, November 2010, Heidelberg, Njemačka: Springer, 2011., pp. 65-83. 10. Grandić, D.; Bjegović, D.; Štimac Grandić, I.: "Deflection of reinforced concrete beams simultaneously subjected to sustained load and reinforcement corrosion", Giuliani, G. C. (ur.).Congress Papers (CD), Paper No 177, Structural Engineers World Congress 2011, Como, Italija, 04-06.04.2011., Milano, Italija: SEWC, 2011., pp. 1-12. 11. Vidović, D.; Grandić, D.; Šćulac, P.: "Effective Stiffness for Structural Analysis of Buildings in Earthquake", Knežević, M.; Šćepanović, B. (ur.), Zbornik radova, Četvrti internacionalni naučno-stručni skup "Građevinarstvo - nauka i praksa - GNP 2012., Žabljak, Crna Gora, 20-24.02.2012: Univerzitet Crne Gore, Građevinski fakultet, pp. 811-818. 12. Grandić, D.; Šćulac, P.; Štimac Grandić, I.: "Shear resistance of reinforced concrete beams in dependence on concrete strength in compressive struts", Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku, 22 (2015) 4, pp. 925-934. 13. Grandić, D.; Šćulac, P.; Štimac Grandić, I.: "Shear resistance of reinforced concrete beams in dependence on concrete strength in compressive struts", Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku, 22 (2015) 4, pp. 925-934. 14. Grandić, Davor ; Štimac Grandić, Ivana: Pitting factor in use of galvanostatic pulse method for measuring the corrosion rate of reinforcement in concrete // Machines, Technologies, Materials, 15 (2021), 7; 259-263 15. Krolo, P. ; Grandić, D.: Hysteresis Envelope Model of Double Extended End-Plate Bolted Beam-to-Column Joint // Buildings, 11 (2021), 11; 517, 22. doi: 10.3390/buildings11110517 16. Palijan, Ivan; Grandić, Davor; Štimac Grandić, Ivana; Krolo, Paulina; Lukačević, Lazar; Bakran, Antonio: Testing of Innovative Composite Wall/Ceiling Panel // International Scientific Journal Industry 4.0, VIII (2023), 5; 155-158 17. Smolčić, Željko; Grandić, Davor; Šćulac, Paulo: Dimenzioniranje armiranobetonskih pravokutnih presjeka prema drugoj generaciji Eurokoda // Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 75 (2023), 12; 1203-1216. doi: 10.14256/JCE.3855.2023 18. Palijan, Ivan; Krolo, Paulina; Štimac Grandić, Ivana; Grandić, Davor: Testing of the structural composite panels to determine the design resistance models // Machines, Technologies, Materials, 18 (2024), 5; 148-152 19. Grandić, Davor; Štimac Grandić, Ivana; Šćulac, Paulo: Assessment of Mechanical Properties of Corroded Reinforcement in Chloride Environment Based on Corrosion Rate Monitoring // Civil engineering journal (Tehran), 10 (2024), 11; 3473-3492. doi: 10.28991/cej-2024-010-11-02 |
| <p>Leader of the following research projects</p> | <p>Project Prefabricated buildings of almost zero energy produced in an industrial way (European Commission - European Regional Development Fund leader at institution: D. Grandić) 1. 8. 2021.- 31. 12. 2023. https://crosis.hr/projekti/projekt/5491</p> |

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| <p>Participant in the following research projects</p> | <ol style="list-style-type: none"> 1. Research project "Modelling of durability of building materials and elements", (No. ZNV project, 0082209, project leader: Prof. Dubravka Bjegović), from 2002 to 2005) 2. Research project "Development of new materials and systems for protection of concrete structures" (project number 082-0822161-2159, project leader: Prof. Dubravka Bjegović), from 2007 to 2012) 3. Joint Croatian-Slovenian research project "Nonlinear numerical modelling of spatial reinforced concrete frames under the influence of steel reinforcement corrosion" (project number 533-06-09-0002, project leader: Prof. Gordan, since 1 January 2009 to 31 December 2010) 4. Research project "Failure mechanisms and behaviour models of innovative connections in timber structures" (project number 114-0000000-3253, project leader: Prof. Adriana Bjelanović), from 2008 to 2010) 5. Scientific research Damage assessment and strengthening of building structures (University of Rijeka, NO 13.05.1.1.01, leader N. Bičanić/I. Štimac Grandić) 2013.–2018. https://croris.hr/projekti/projekt/6555 6. Scientific research Improvement of design models for condition assessment of structures (University of Rijeka; uniri-tehnic-18-127, leader I. Štimac Grandić) 2018. - 2023. godine https://croris.hr/projekti/projekt/5461 7. Assessment of masonry arches and vaults 2020-2022/ University of Rijeka (leadre: P. Šćulac) 8. UNIRI projekti 2023 Adjustment of the methodology for assessing the seismic resistance of existing masonry buildings in the Kvarner Littoral (uniri-iskusni-tehnic-23-198 – University of Rijeka, leader: A. Bjelanović) 2024. do danas https://www.croris.hr/projekti/projekt/10158 |
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| <p>Supervision of PhD theses</p> | <p>3</p> |
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| <p>Examination of PhD theses</p> | <p>4</p> |
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