Name of teacher:		Paulo Šćulac
Employed at: Since:		University of Rijeka, Faculty of Civil Engineering 1.10.2007.
Academic rank: Since: In:		Assistant professor 7.4.2016 Civil Engineering, Structural Engineering
e-mail address, web page		paulo.sculac@uniri.hr, https://portal.uniri.hr/Portfelj/Details/1671
Knowledge of foreign languages:		Active: English; Passive: Italian, German
Qualifications	<ul> <li>date of birth, nationality: 29.06.1984. Croatian nationality</li> <li>First degree obtained at: University of Rijeka, Faculty of Civil Engineering, 2007.</li> <li>Ph.D. degree obtained at: Univers. of Rijeka, Faculty of Civil Engineering, 2014.</li> <li>additional education:</li> <li>previous employments:</li> </ul>	
List of papers published in scientific journals	<ul> <li>- Grandić, D., Štimac Grandić, I., Šćulac, P.: Assessment of mechanical properties of corroded reinforcement in chloride environment based on corrosion rate monitoring, Civil Engineering Journal, 10 (2024), 11, 3473-3492.</li> <li>- Štimac Grandić, I., Šćulac, P., Grandić, D., Vodopija, I.: The accessible design of pedestrian bridges, Sustainability, 16 (2024), 3, 1063, 17p.</li> <li>- Šćulac, P., Čeh, N.: Experimental test on a pointed arch model monitored by contactless optical system, International Journal of Masonry Research and Innovation, 9 (2024), 3, 252-267.</li> <li>- Smolčić, Ž., Grandić, D., Šćulac, P.: Design of reinforced concrete rectangular cross-sections according to the second generation of Eurocode, Građevinar: Journal of the Croatian Association of Civil Engineers, 75 (2023), 12, 1203-1216.</li> <li>- Grandić, D., Šćulac, P., Štimac Grandić, I.: Shear resistance of reinforced concrete beams in dependence on concrete strength in compressive struts, Tehnički vjesnik – Technical Gazette, 22 (2015), 4, 925-934.</li> <li>- Šćulac, P., Jelenić, G., Škec, L.: Kinematics of layered reinforced-concrete planar beam finite elements with embedded transversal cracking, International Journal of Solids and Structures, 51 (2014), 1, 74-92.</li> </ul>	
	- Šćulac, F beam finite Solids and	P., Jelenić, G., Škec, L.: Kinematics of layered reinforced-concrete planar e elements with embedded transversal cracking, International Journal of Structures, 51 (2014), 1, 74-92.  D., Šćulac, P., Štimac Grandić, I.: Shear resistance of reinforced

## List of publications which serve as a proof of teaching qualifications

- Grandić, D., Šćulac, P., Štimac Grandić, I.: Shear resistance of reinforced concrete beams in dependence on concrete strength in compressive struts, Tehnički vjesnik Technical Gazette, 22 (2015), 4, 925-934.
- Jelenić, G., Šćulac, P., Grandić, D.: A simple reinforced-concrete beam model accounting for the effect of tension stiffening, Proceedings of 7th International Congress of Croatian Society of Mechanics ICCSM, ed.: Virag, Z., Kozmar, H., Smojver, I., Zagreb: Croatian Society of Mechanics, 2012.
- Šćulac, P., Jelenić, G.: Modelling cracking in reinforced-concrete beams using beam finite elements with embedded discontinuity, Computational Modelling of

Concrete Structures - Proceedings of EURO-C 2014, ed.: Bićanić, N., Mang, H., Meschke, G., de Borst, R., London: Taylor and Francis Group, 2014., 569-578. - Grandić, D., Šćulac, P., Brnić, D., Višnjić, M.: Pushover analysis of a reinforced concrete two-bay frame; concentrated vs distributed plasticity model, 14th Central European Congress on Concrete Engineering Proceedings, ed.: Nenadálová, Š.; Švejda Johová, P., Czech Concrete Society CBS, 2024. 221-229. - Šćulac, P., Grandić, D., Palinić, N.: First reinforced concrete building in Rijeka Port - Ferenc Pfaff's warehouse No. 17, 12th International conference on structural analysis of historical constructions SAHC 2021, Barcelona: International Centre for Numerical Methods in Engineering (CIMNE), 2021, 257-268. - Šćulac, P., Grandić, D., Štimac Grandić, I.: Degradation of tension stiffening due to corrosion - an experimental study on cracked specimens, Proceedings of the 2nd International Conference CoMS 2020/21, Ljubljana: Slovenian National Building and Civil Engineering Institute, 2020. 287-294. Leader of the - "Assessment of masonry arches and vaults (ZIP-UNIRI-1500-3-20)", 11.11.2020. following research 11.11.2022., University of Rijeka. projects

## - "Configuration-de Structures (IP-11-2

Participant in the

projects

following research

- "Improved accuracy in non-linear beam elements with finite 3D rotations (114-0000000-3025)", project leader prof.dr.sc. Gordan Jelenić, 1.10. 2007. 31.12.2009., Ministry of Science, Education and Sports.
- "Nelinearno numeričko modeliranje prostornih armiranobetonskih okvira pod utjecajem korozije armature", project leader prof.dr.sc. Gordan Jelenić, 1.1.2009. -31.12.2010., Bilateral Croatian-Slovenian scientific project.
- "Configuration-dependent Approximation in Non-linear Finite-element Analysis of Structures (IP-11-2013-1631)", project leader prof.dr.sc. Gordan Jelenić, 1.9.2014. 31.08.2018., Croatian Science Foundation.
- "Assessment of damage and strengthening of civil engineering structures (13.05.1.1.01)", project leader prof. dr.sc. Nenad Bićanić and prof.dr.sc. Ivana Štimac Grandić 01.01.2014. 31.12.2018., University of Rijeka.
- "Prefabricated buildings of almost zero energy produced in an industrial way (KK.01.2.1.02.0046)", project leader prof.dr.sc. Davor Grandić, 01.08.2020. 31.12.2023., European Regional Development Fund.
- "Improvement of design models for condition assessment of structures (uniritehnic-18-127)", project leader prof.dr.sc. Ivana Štimac Grandić, 03.12.2018. 31.12.2021.. University of Rijeka.
- "Adjustment of the methodology for assessing the seismic resistance of existing masonry buildings in the Kvarner Littoral (uniri-iskusni-tehnic-23-198)", project leader prof.dr.sc. Adriana Bjelanović, 15.04.2024. 14.04.2025., University of Rijeka.

Supervision of PhD theses	-
Examination of PhD theses	-