

<b>Module Title and Purpose</b>	<b>1.Module Title, Code:</b>  <b>BRIDGES</b> <b>Obligatory professional</b>  <b>30-URA-144</b>
	<b>2 .Aims / Goals of the Module :</b>  Gaining basic knowledge about all bearing systems of bridges; bridge design, construction and maintenance procedures and methods, Gaining basic knowledge in bridge conceptual design, numerical analysis of bridges and the dimensioning the bearing system.
<b>Module Delivery and content</b>	<b>3 .Contents:</b>  Lectures:  1. Introduction and basic terms [2]  2. Types of bridges, basic requirements for bridges and traffic conditions [4]  3. Loadings on bridge [2]  4. Factors of bridge reliability; elements of bridge disposition [2]  5. Bearing systems of bridges – 1st part [2]  6. Bearing systems of bridges – 2nd part [4]  7. Substructure and bridge equipment [4]  8. Aesthetics of bridges [2]  9. Construction of bridges [2]  10. Maintaining of bridges and bridges in extraordinary circumstances [2]  11. Overview of history of bridge building [2]  12. Contemporary achievements in bridge engineering [2]
	<b>4 .Literatura / Indicative Reading List:</b>  [1] ,Tonković, K: Oblikovanje mostova, Tehnička knjiga, Zagreb, 1985  [2] onković, K: Mostovi, Sveučilišna naklada Liber, Zagreb, 1981  [3] Wai-Fah, Chen, Lian Duan: Bridge Engineering Handbook, CRC Pres 2000,[4] Radić, J:Mostovi, Dom i svijet, Zagreb 2002
	<b>5 .Teaching and Learning Methods:</b>  The lectures, exercises, consultations, graphic works

	<p>Total Contact Hours: <b>28+28+3= 59</b> Hours</p> <p>Range of other Learning Methods:</p> <p>Total Study Hours: <b>41</b> Hours</p> <p>Total contact and study hours: <b>100</b> Hours</p>
<b>Module Assessment</b>	<p><b>6 .Module Learning Outcomes :</b></p> <p>Acquiring basic knowledge and skills needed to design the bearing system of a bridge and the application of the basic principles of conceptual design, Acquiring knowledge and skills necessary to analyse the behaviour of the bearing system and the bridge design according to the ultimate limit state and the serviceability limit state using modern methods and European codes, Knowledge about and ability to select the appropriate bearing system of a bridge, depending on the geometry and boundary conditions in accordance with modern methods and criteria of European codes, Basic knowledge about all bearing systems and ability to design a reinforced concrete bridge up to span of 20 m in accordance with the modern methods and the criteria of European norms.</p> <p><b>7 . Assessment Methods:</b></p> <p>Attendance in lectures, elaborate, written examination, oral examination</p> <p>Number, type and weighting of elements/:</p> <p>Attendance 10%, Assignment (elaborate): 30 %, Written exam : 40 % , oral Exam 20% Total 100%.</p>
<b>Number of ECTS and duration</b>	<p><b>8 ECTS</b> .Credit Points and Duration</p> <p><b>4 ECTS</b>, one semester, (semester VI)</p>
<b>Teacher</b>	<b>Dr Nebi Pilana</b>