COURSE		**TIMBER STRUCTURE I**		
LECTURER		Prof. Esad Mešić Ph.D.		
STUDY	***STATUS***	***SEMESTER***	***NUMBER OF LESSONS L+E***	***ECTS***
B - CE	Compulsory	IV	2+1	4

OBJECTIVES

- Students learn about wood as a structure material, phisical/mechanical properties and benefits of using. Content of the course gives knowledge about main principals of structural elements computation and a connection design.

LEARNING OUTCOMES

- Taking knowledge about wood as a structural material
- Design of a simple timber structures

COURSE CONTENT

- Wood and wood products as a structure material. Wood technology. Wood properties. Timber calssification. Computational concepts in timber structures. Allowable stress method. Relevant factors which have effects to resistance of timber structures. Design of timber structures. Tension member. Bending. Biaxial bending. Compression member. Columns. Initial imperfection. Combined axial tension and bending. Connectors. Bolts. Nails. Dowels. Connections and splices. Connections of tension members. Simple bearing joint at angled notch. Orthogonal connections. Clasical roofs. Design. Trusses (shapes and design). Glued laminated timber (technology of production, structures details, design basis).

RECOMMENDED LITERATURE

1. Drvene konstrukcije (Milan Gojković i Dragoslav Stojić, Beograd, 1999.)
2. Drvene konstrukcije I, II, (Zvonimir Žagar, Zagreb, 2000.)
3. Holzbau 1 i 2 (Werner i Zimmer, Springer, 1999.)

NAČIN POLAGANJA ISPITA

Elaborate	20 %
I Test	15 %
II test	15 %
Final exam (writting part)	25 %
Final exam (oral part)	25 %

For the final part of the exam it is necessary to achieve at least 55% of the points on the elaborate and both tests.