



Socrates



Enhancing student mobility in a digital world:
sharing experiences in an enlarged Europe
SUMIT seminar
University of Warsaw
October 11th - 12th, 2007

Prof.dr. Mirta Baranović
University of Zagreb
Faculty of Electrical engineering and Computing
Croatia

- Introduction
- Global (Croatian) Information Infrastructure
 - ISVU - Information System for Higher Education
 - Students' subsidised nourishment information system - ISSP
 - E-Index (Matriculation Book)
- Institutional Information Infrastructure (Content management system, e-learning system, library, ICT resource management system)
- Additional functionalities to support students' mobility
- Standardization of e-documents on European Level

Introduction

- Projects funded by Ministry of Science, Education and Sports to provide software for the whole higher education in Croatia (ISVU, ISSP, e-Index)
- Institutional Information Infrastructure
 - Faculties are legal entities with different level of informatization
 - Faculty of Electrical Engineering and Computing is the leader in the field; some of the faculties are following their example and are adopting some solutions

Croatian Information System for Higher Education - ISVU

■ Project Goals

- Complete, correct and up to date information
 - Syllabus
 - Educational schemes
 - Students
 - Teachers
- ➡ Implementation
 - ➡ course - teacher - student - time table

ISVU - Data collections

- Departments/Chairs, teachers, assistants
- Syllabus, educational scheme, rules, time table
- Students' enrolment
- Matriculation, yearly enrolment, tuition
- Students' educational obligations
- Continuous assessment
- Examinations
- Graduation

ISVU

examples

ISVU - Informacijski sustav visokih učilišta Studiji i studenti <<< Razvojna verzija >>>

Kontrola Nastavni program Nastavni plan Ispit Student Upis godine Završetak studija Ustanova Izjave Potvrde Zajednički katalozi Opcije Pomoć

Predmet

Osnovni podaci o predmetu

Visoko učilište 36 Fakultet elektrotehnike i računarstva

Šifra predmeta 1228 Kratica predmeta RAČ1208

Naziv predmeta Baze podataka

Ulazi u prosjek Da Polaze se Da ECTS bodovi 5.0

Najuža ustrojst. jedinica predmeta 100983 Računarske znanosti

Predmet se predavao od ak.god. 2003 / 2004 do ak.god. 2007 / 2008

Isključivo kontinuirano praćenje nastave Ne

Web adresa predmeta http://www.fer.hr/predmet/bazpod

Komentar ZPM1208 (velika promjena u sadržaju i opsegu predmeta)

Naziv predmeta na ostalim jezicima

Engleski Databases

Njemački

Francuski

Talijanski

5 / 5

Ukupno opterećenje predmeta

Vrsta nastave	Opis	Sati ukupno
P	Predavanja	30
A	Auditorne vježbe	15
L	Laboratorijske vježbe	15

Izvedba predmeta

Redni broj izvedbe	Trajanje u semestrima	ECTS bodovi
1	1	5.0

Opterećenje komponenata izvedbe

Rbr. komponente	Vrsta nastave	Opis	Sati ukupno
1	P	Predavanja	30
1	A	Auditorne vježbe	15
1	L	Laboratorijske vježbe	15

1 / 3

Komponente izvedbe predmeta

Rbr komponente	ECTS bodovi
1	5.0

Course Definition

ISVU - Informacijski sustav visokih učilišta Studiji i studenti <<< Razvojna verzija >>>

Kontrola Nastavni program Nastavni plan Ispit Student Upis godine Završetak studija Ustanova Izješća Potvrde Zajednički katalozi Opcije Pomoć

Predmet u akademskoj godini

Visoko učilište 36 Fakultet elektrotehnike i računarstva

Šifra predmeta 1228 Kratica predmeta RAČ1208

Naziv predmeta Baze podataka

Akadska godina 2007 / 2008 Deaktivacija oslobođenja na studomatu Da

1 / 1

Opis predmeta Literatura Izvođači

Oznaka jezika en Naziv jezika Engleski

Opis predmeta Database management system architecture. Transaction processing. Concurrency control. Stored procedures. Triggers. Data security and authorization. Recovery system. Query processing and optimization. Client-server and distributed database architecture. Mobile databases. Object-oriented databases, Object-relational databases. Object-relational database design. Unified modelling language. Object-relational query languages. Data integration, databases and web, XML and XML databases.

2 / 2

Course Description

UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

ISVU - Informacijski sustav visokih učilišta Studiji i studenti <<< Razvojna verzija >>>

Kontrola Nastavni program Nastavni plan Ispit Student Upis godine Završetak studija Ustanova Izvešća Potvrde Zajednički katalozi Opcije Pomoć

Predmeti u semestru za element strukture studija

Visoko učilište 36 Fakultet e Sveučilište u Zagrebu

Element strukt. studija 20 Računars

Razina studija 1 dodiplomski

Akadska godina 2007 / 2008

Upisuje se paralelno s drugim Ne

Zaključan Da

44 / 54

Obvezni predmeti Grupe izbornih predmeta

Predmet	Kratika predmeta	Naziv predmeta
570	RAČ-08	Seminar
445	RAČ0808	Analiza i projektiranje račun
1228	RAČ1208	Baze podataka
1163	RAČ1108	Formalni postupci u obliko
27	HUM0808	Ekonomika

Izbor postavki za generiranje pregleda n...

Izbor jezika

Engleski

Izbor načina pregleda vrste nastave

Pregled prema VRSTAMA NASTAVE

Što se prikazuje uz naziv predmeta?

☒ Kratica ☐ Šifra

☒ Spremi stranice lokalno

☒ Spremi podatke u XML formatu

☒ Prikaži sve izvodače nastave

Generiraj Odustani

r komponente	Opterećenje komponente	ECTS bodovi	Rt
2	1P 1L	5.0	
1	3P 1A 2L	6.0	
1	2P 1A 1L	5.0	
1	3P 1A 2L	6.0	
1	2P	2.0	

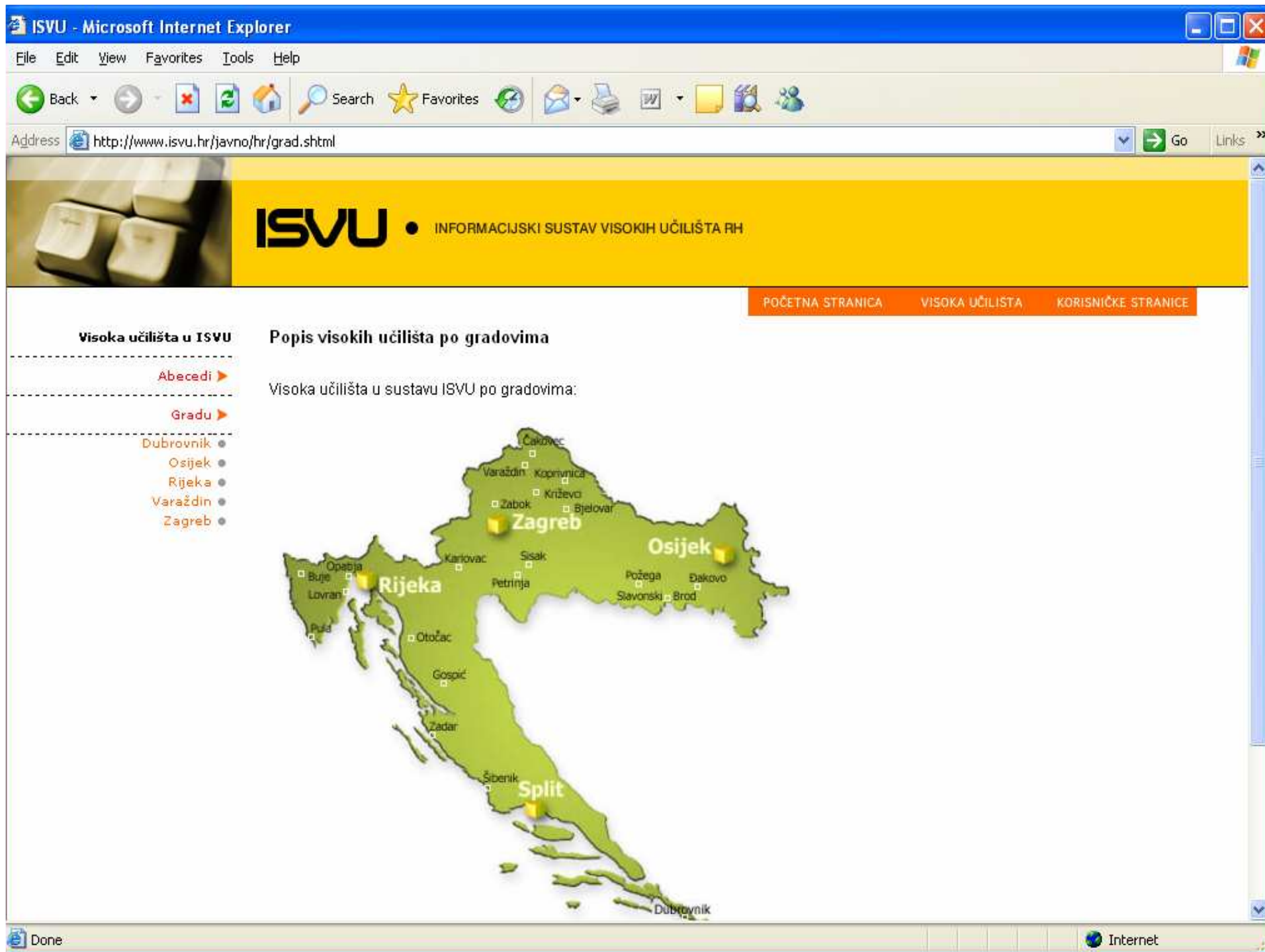
1 / 5

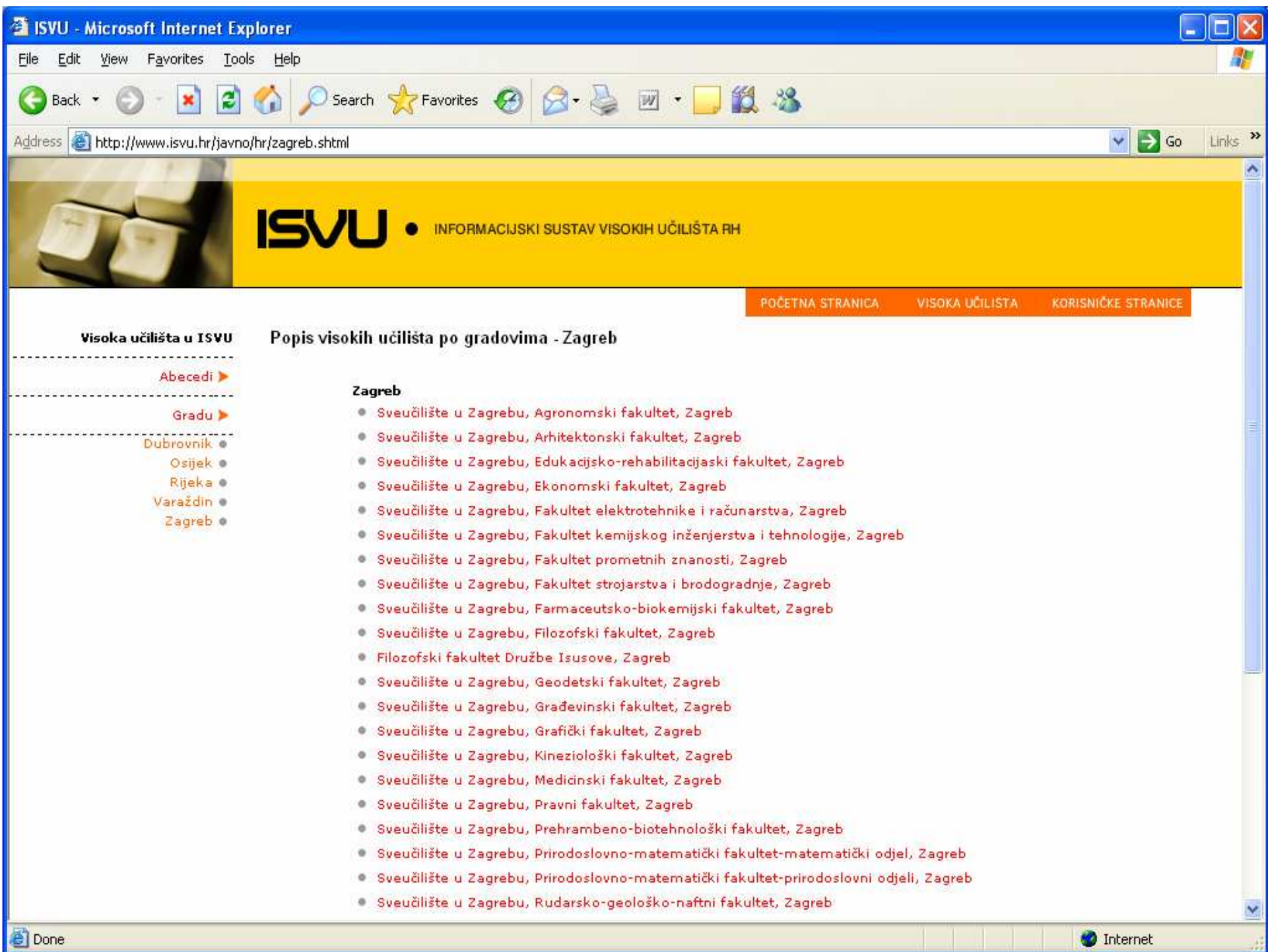
Syllabus

UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

Presentation of curricula on ISVU portal

www.isvu.hr





ISVU - Faculty of Electrical Engineering and Computing - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Mail Print Wordpad New Folder Run As Administrator

Address <C:\Documents and Settings\mirta.ZPM\My Documents\tmp\nasprog.html> Go Links >>

To help protect your security, Internet Explorer has restricted this file from showing active content that could access your computer. Click here for options...

7	TKI0707	Switching Systems	3	0	2	0	5.0
	TKI0807	Transmission Systems	3	0	2	0	5.0
	TKI0907	Teletraffic Theory	3	2	0	0	5.0
	TKI-08	Guided Research (1/2)	1	0	2	0	5.0
		Elective courses > Number of ECTS credits to select: at least 8					
		Humanistic courses > Number of courses to select: at least 1					
8	TKI-08	Guided Research (2/2)	1	0	3	0	7.0
	TKI1008	Communication Protocols	3	1	1	0	5.0
	TKI1108	Reliability of Telecommunication Systems	3	1	1	0	5.0
	TKI1208	Telematic Services	3	0	1	0	5.0
	HUM0808	Economics	2	0	0	0	2.0
		Elective courses > Number of ECTS credits to select: at least 6					
9	DIPLOM*	Graduation Thesis	1	0	14	0	18.0
	TKI1309	Multimedia Communications	2	0	1	0	3.0
		Elective courses > Number of ECTS credits to select: at least 9					

Study : Electrical Engineering, Information Technology and Computing

Type of study : Full time study Duration : 6 semestre(s)

1		Mathematics 1	6	0	0	0	7.0
		Fundamentals of Electrical Engineering	5	0	1	0	7.0
		Digital Logic	4	0	1	0	6.0
		Programming and Software Engineering	4	0	1	0	6.0
		Skills of Communication	2	0	0	0	3.0
		Laboratory and Skills - Mathematica	0	0	1	0	1.0
	*	Physical Education 1	0	0	2	0	
		Mathematics 2	6	0	0	0	7.0
		Physics 1	5	0	1	0	6.0
	ASP	Algorithms and Data Structures	4	0	1	0	6.0


Done My Computer

ISVU - Course description - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print Mail New Tab New Window

Address <http://www.isvu.hr/javno/en/vu36/nasprog/2007/pred1228.shtml> Go Links



POČETNA STRANICA VISOKA UČILISTA KORISNIČKE STRANICE

Podaci o VU

[Početna stranica](#) ➤

[Arhiva nastavnih programa](#) ➤

[Arhiva ak. kalendara](#) ➤

Databases

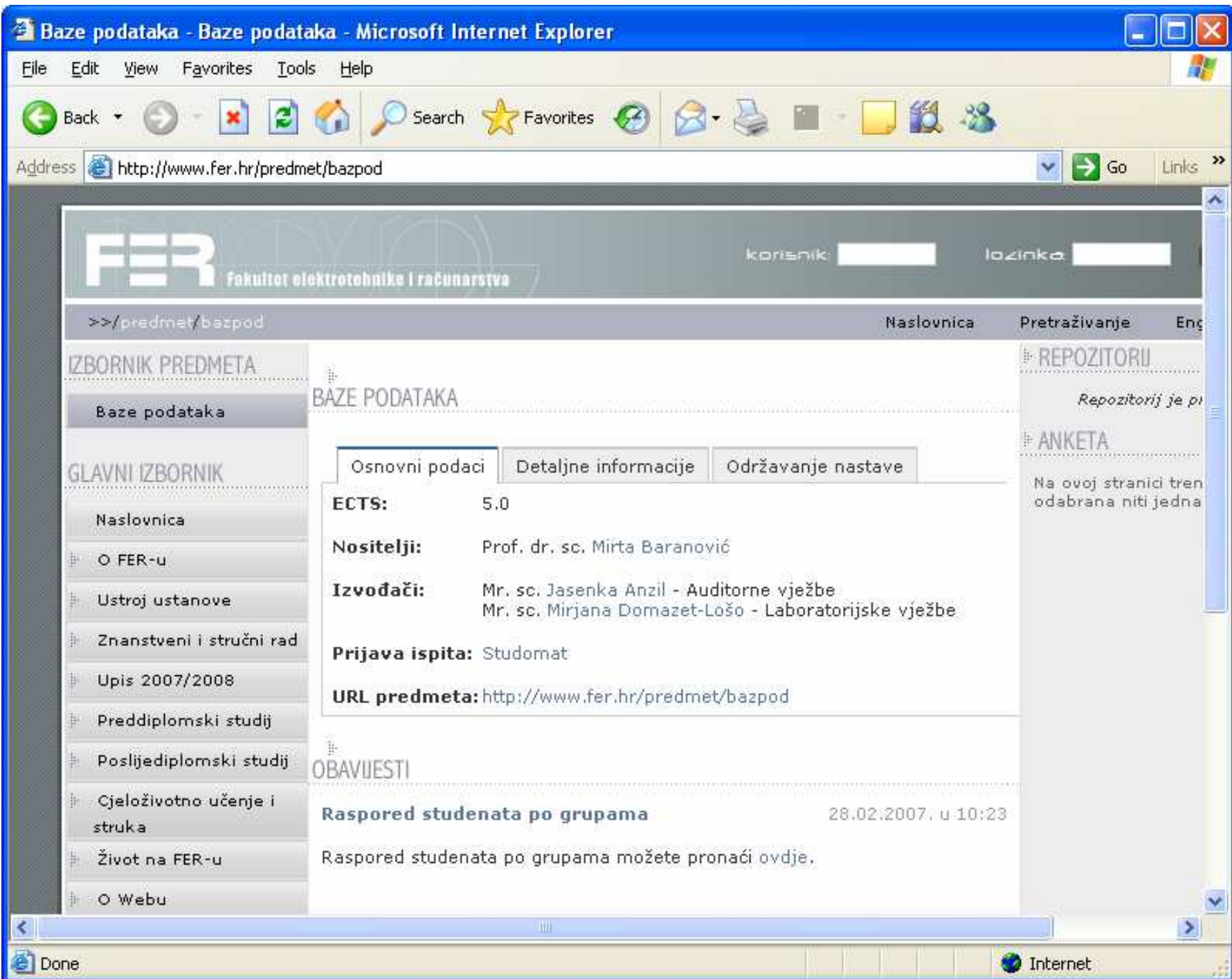
Abbreviation: RAČ1208	Load: 30(L) + 15(E) + 15(LE) + 0(CE)
Lecturers in charge:	Prof. dr. sc. Mirta Baranović
Lecturers:	mr. sc. Jasenka Anzil (Exercises) mr. sc. Mirjana Domazet-Lošo (Exercises, Laboratory exercises)
Course description: Database management system architecture. Transaction processing. Concurrency control. Stored procedures. Triggers. Data security and authorization. Recovery system. Query processing and optimization. Client-server and distributed database architecture. Mobile databases. Object-oriented databases. Object-relational databases. Object-relational database design. Unified modelling language. Object-relational query languages. Data integration, databases and web, XML and XML databases.	
Literature:	
1.	H. Garcia-Molina, J. D. Ullman, J. D. Widom: Database Systems: The Complete Book, Prentice-Hall, 2001.
2.	A. Silberschatz, H. F. Korth, S. Sundarshan: Database System Concepts, McGraw-Hill, 2001.
3.	R. Elmasri, S. B. Navathe: Fundamentals of Database Systems, 3/e, Addison-Wesley, 2000.
Literature: - - -	
Prerequisite for enrollment:	

Internet

Curricula presentation on the institutional portal

Faculty of Electrical Engineering and
Computing

www.fer.hr



Baze podataka - Baze podataka - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites RSS Mail Print Wordpad Find People

Address <http://www.fer.hr/predmet/bazepod> Go Links »

>>/predmet/bazepod Naslovnica Pretraživanje English

IZBORNIK PREDMETA

Baze podataka

GLAVNI IZBORNIK

Naslovnica

O FER-u

Ustroj ustanove

Znanstveni i stručni rad

Upis 2007/2008

Preddiplomski studij

Poslijediplomski studij

Cjeloživotno učenje i struka

Život na FER-u

O Webu

BAZE PODATAKA

Osnovni podaci Detaljne informacije Održavanje nastave

Opterećenje:

Vrsta nastave	Tjedno	Ukupno
Predavanja	4	60
Laboratorijske vježbe	1	15

* Opterećenje je izraženo u školskim satima (1 školski sat = 45 minuta)

Opis predmeta:

Ovo je osnovni kolegij iz područja baza podataka kojemu je cilj upoznati studente sa sustavima za upravljanje bazama podataka, relacijskim modelom i relacijskim bazama podataka. Izučava se način oblikovanja relacijskih baza podataka i oblikovanje modela entiteti-veze, relacijska algebra, upitni jezik SQL i osnove zaštite baza podataka.

Literatura:

1. A First Course in Database Systems J. D. Ullman, J. Widom Prentice-Hall 2001.
2. Database Systems Concepts, 5th Edition A. Silberschatz, H.F. Korth, S. Sudarshan McGraw-Hill 2005
3. An Introduction to Database Systems, 8th Edition C.J. Date Addison Wesley 2003
4. Database Systems: A Practical Approach to Design, Implementation, and Management T. M. Connolly, C. E. Begg Addison Wesley 2004
5. Relacijski model podataka S. Tkalac DRIP 1988
6. Baze podataka M. Varga DRIP 1994

Preduvjeti za:

Upis predmeta:

Položen: Operacijski sustavi

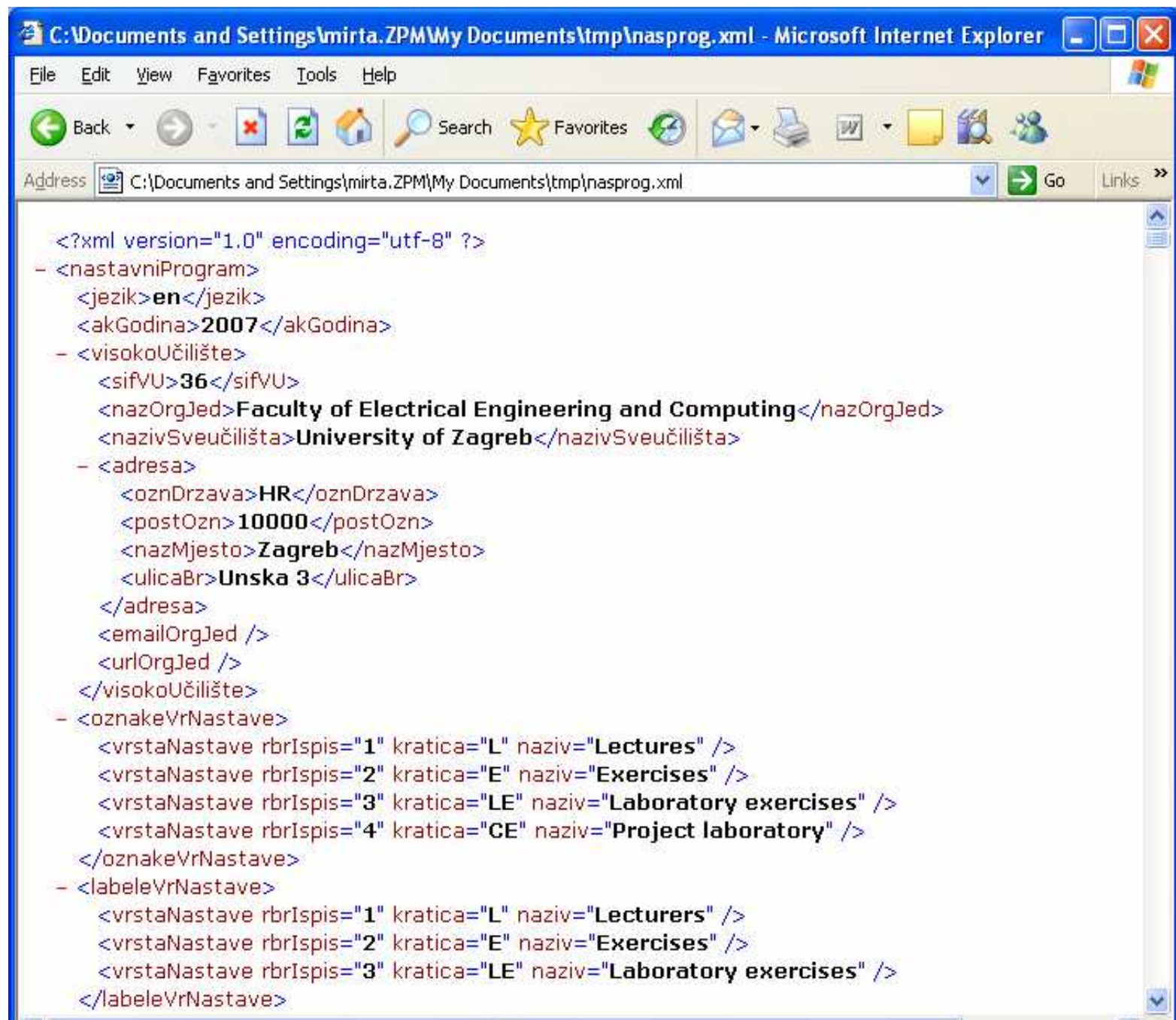
REPOZITORIJ

Repozitorij je prazan.

ANKETA

Na ovoj stranici trenutno odabrana niti jedna anketa.

Internet



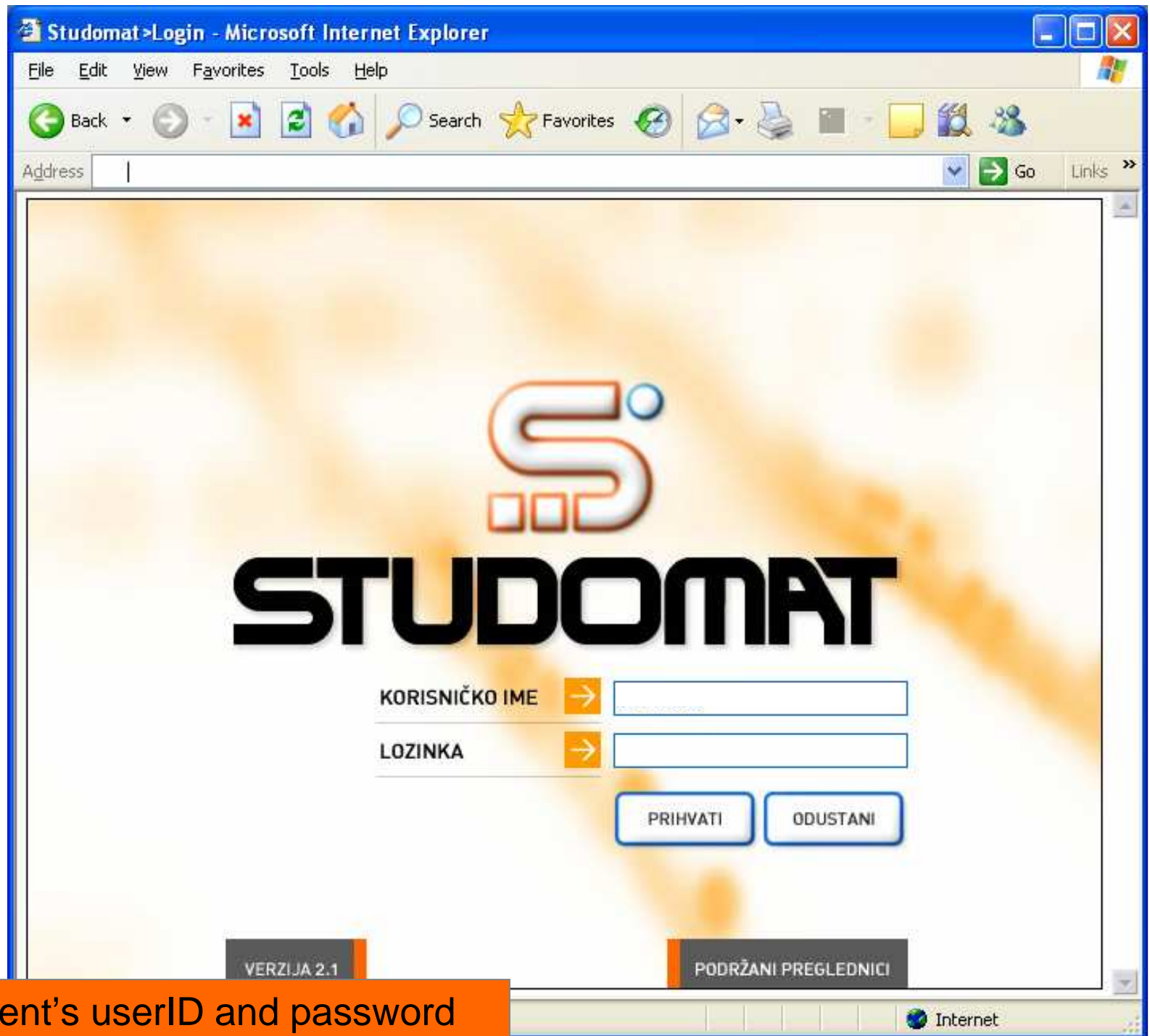
The screenshot shows a Microsoft Internet Explorer window with the title bar "C:\Documents and Settings\mirta.ZPM\My Documents\tmp\nasprog.xml - Microsoft Internet Explorer". The address bar shows the file path "C:\Documents and Settings\mirta.ZPM\My Documents\tmp\nasprog.xml". The main content area displays an XML document with the following structure:

```
<?xml version="1.0" encoding="utf-8" ?>
- <nastavniProgram>
  <jezik>en</jezik>
  <akGodina>2007</akGodina>
- <visokoUčilište>
  <sifvU>36</sifvU>
  <nazOrgJed>Faculty of Electrical Engineering and Computing</nazOrgJed>
  <nazivSveučilišta>University of Zagreb</nazivSveučilišta>
- <adresa>
  <oznDrzava>HR</oznDrzava>
  <postOzn>10000</postOzn>
  <nazMjesto>Zagreb</nazMjesto>
  <ulicaBr>Unska 3</ulicaBr>
</adresa>
  <emailOrgJed />
  <urlOrgJed />
</visokoUčilište>
- <oznakeVrNastave>
  <vrstaNastave rbrIspis="1" kratica="L" naziv="Lectures" />
  <vrstaNastave rbrIspis="2" kratica="E" naziv="Exercises" />
  <vrstaNastave rbrIspis="3" kratica="LE" naziv="Laboratory exercises" />
  <vrstaNastave rbrIspis="4" kratica="CE" naziv="Project laboratory" />
</oznakeVrNastave>
- <labelVrNastave>
  <vrstaNastave rbrIspis="1" kratica="L" naziv="Lecturers" />
  <vrstaNastave rbrIspis="2" kratica="E" naziv="Exercises" />
  <vrstaNastave rbrIspis="3" kratica="LE" naziv="Laboratory exercises" />
</labelVrNastave>
```

Data are transferred by the XML document

Data about students

- Student enrolment at the faculty
- Yearly enrolment - compulsory and elective subjects
- Examinations, applying for examinations, written examination schedule, results of written examination, oral examination schedule, commission examination
- Continuous assessment - results
- Certificates, transcriptions of records in different languages
- Graduation thesis and graduation examination
- Diploma supplement in different languages



Entering student's userID and password

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print Mail Stop Go Links

Address

STUDOMAT

Srijeda, 10.10.2007

Status predmeta >

Naziv predmeta	Ak. god.	Za prosjek	ECTS bod.	Ocjena	Grupe
Linearna algebra	2003./2004.	Da	6,0	3	→
Matematička analiza I	2003./2004.	Da	7,0	4	→
Fizika I	2003./2004.	Da	7,0	2	→
Osnove elektrotehnike I	2003./2004.	Da	7,0	2	→
Primjena računala	2003./2004.	Ne	3,0		→
Matematička analiza II	2003./2004.	Da	7,0	3	→
Fizika II	2003./2004.	Da	7,0	3	→
Osnove elektrotehnike II	2003./2004.	Da	7,0	2	→
Inženjerska grafika i dokumentiranje	2003./2004.	Da	3,0	5	→
Tjelesni odgoj I	2003./2004.	Ne	1,0		→

ISPITI ☒

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☐

OSOBNI PODACI

UPISANA VISOKA UČILIŠTA

UPISANE GODINE

RAZINA PRAVA NA PREHRANU

STATUS PREDMETA

PREGLED ŠKOLARINA

KORISNIČKE OPCIJE ☒

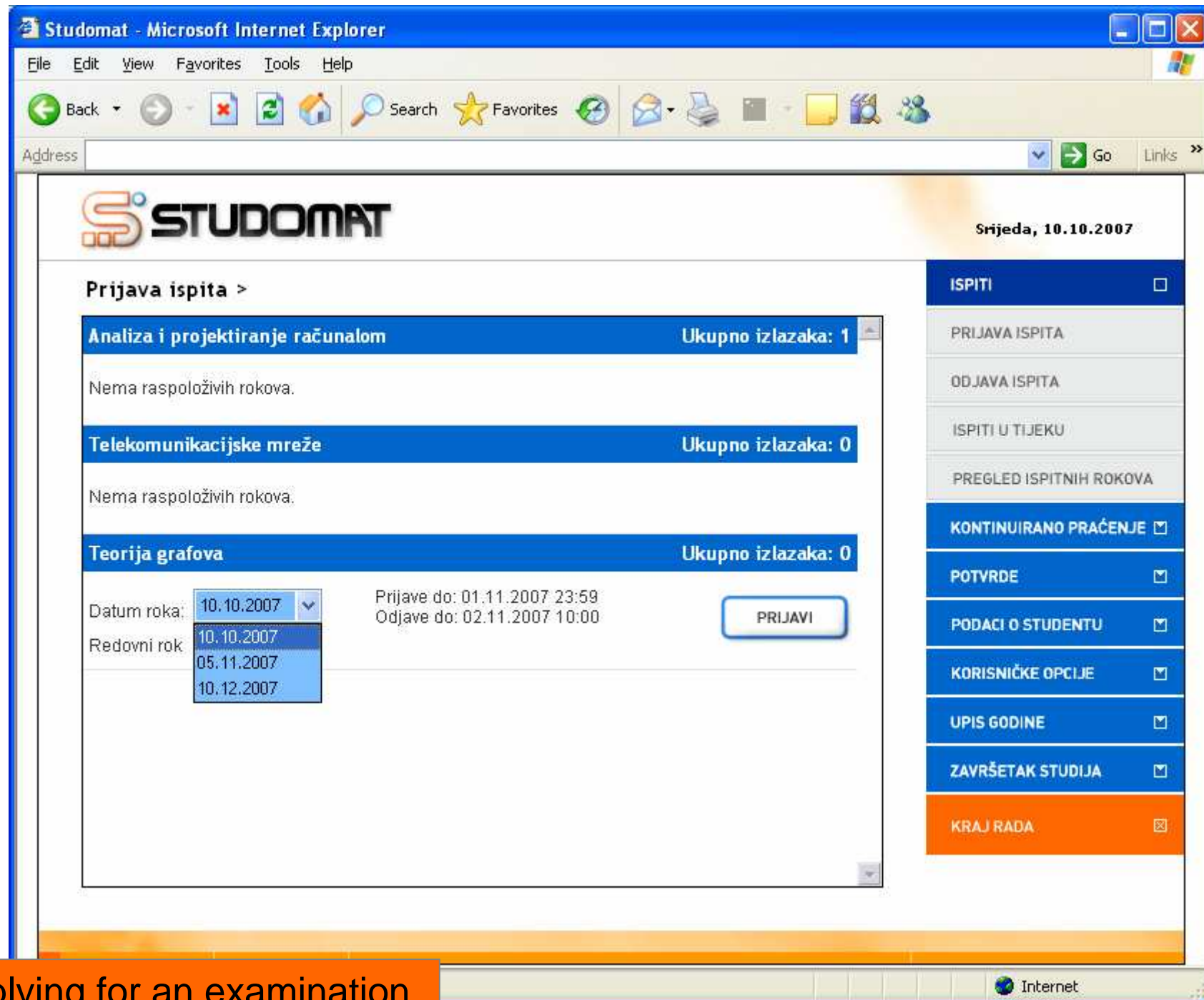
UPIS GODINE ☒

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet

Status of enrolled subjects



Applying for an examination

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print Mail Stop Go Links

Address

STUDOMAT

Srijeda, 10.10.2007

Odjava ispita >

Predmet	Datum roka	Prijave do	Odjave do	
Teorija grafova	10.10.2007	10.10.2007 23:59	10.10.2007 23:59	<input type="button" value="ODJAVI"/>

ISPITI ☐

PRIJAVA ISPITA

ODJAVA ISPITA

ISPITI U TIJEKU

PREGLED ISPITNIH ROKOVA

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☒

KORISNIČKE OPCIJE ☒

UPIS GODINE ☒

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet

Canceling of the application for the examination

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Stop Go Links

Address

STUDOMAT

Srijeda, 10.10.2007

Ispiti >

Teorija grafova - 10.10.2007., 1. izlazak			Ocjena pismenog: - - -
Pismeni	10.10.2007	16:00	A101
Usmeni	- - -	- - -	- - -

ISPITI ☐

PRIJAVA ISPITA

ODJAVA ISPITA

ISPITI U TIJEKU

PREGLED ISPITNIH ROKOVA

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☒

KORISNIČKE OPCIJE ☒

UPIS GODINE ☒

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet

Schedule for written part of the examination

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print Mail Go Links

Address

STUDOMAT

Srijeda, 10.10.2007

Ispiti >

Teorija grafova - 10.10.2007., 1. izlazak			Ocjena pismenog: 4
Pismeni	10.10.2007	16:00	A101
Usmeni	11.10.2007	10:00	D102

ISPITI ☐

PRIJAVA ISPITA

ODJAVA ISPITA

ISPITI U TIJEKU

PREGLED ISPITNIH ROKOVA

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☒

KORISNIČKE OPCIJE ☒

UPIS GODINE ☒

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet

Grade of written part of the examination and
schedule for oral part of the examination

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Go Links

STUDOMAT Srijeda, 10.10.2007

Upis godine > Studiji/smjerovi >

Možete upisati:

Nastavna godina : 5
Način upisa : prvi upis
Temelj financiranja : uspjeh (hrvatski državljani)
Plaćanje : ne

Studij: Računarstvo (redovni) **UPIŠI** predmeti →

ISPITI ☒
KONTINUIRANO PRAĆENJE ☒
POTVRDE ☒
PODACI O STUDENTU ☒
KORISNIČKE OPCIJE ☒
UPIS GODINE ☐
UPIS GODINE
UPIS PREDMETA S VIŠE GODINE
UPIS PREDMETA NA ZAHTJEV
ZAVRŠETAK STUDIJA ☒
KRAJ RADA ☒

Year enrollment


Internet

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites RSS Print Mail News Groups

Address Go Links



Srijeda, 10.10.2007

Upis godine > Studiji/smjerovi > Obvezni/izborni >

NATRAG

Zimski semestar

Obvezni predmeti →

Izborni predmeti

Izborni predmet

Broj ECTS bodova koje je potrebno odabrati: najmanje 6. →

ISPITI

KONTINUIRANO PRAĆENJE

POTVRDE

PODACI O STUDENTU

KORISNIČKE OPCIJE

UPIS GODINE

UPIS GODINE

UPIS PREDMETA S VIŠE GODINE

UPIS PREDMETA NA ZAHTJEV

ZAVRŠETAK STUDIJA

KRAJ RADA

Selection of courses

Internet

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Go Links

STUDOMAT Srijeda, 10.10.2007

Upis godine > Studiji/smjerovi > Obvezni/izborni > Obvezni predmeti >

[NATRAG](#)

Upis prema nastavnom programu

Naziv	Predavanja	Vježbe	ECTS bodovi	semestar
Izrada diplomskog rada	15	210	18.0	Zimski
Modeliranje i simuliranje	30	45	6.0	Zimski

Ponovni upis zbog neobavljanja nastavnih obveza

Naziv	Predavanja	Vježbe	ECTS bodovi	semestar
Mreže računala	45	45	6.0	Zimski

ISPITI ☒

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☒

KORISNIČKE OPCIJE ☒

UPIS GODINE ☐

UPIS GODINE

UPIS PREDMETA S VIŠE GODINE

UPIS PREDMETA NA ZAHTJEV

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet


Enrolled compulsory courses

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Reload Print View Source View Images View All Links

Address Go Links >>



Srijeda, 10.10.2007

Upis godine > Studiji/smjerovi > Obvezni/izborni > Izbor predmeta >

NATRAG

Izborni predmet : Broj ECTS bodova koje je potrebno odabrati: najmanje 6.
 Broj ECTS bodova koji su trenutno odabrani: 7.5.

Predmeti koje možete odabrati

Naziv	Pred.	Vježbe	Info	ECTS bodovi	semestar	Upisati
Biomedicinska informatika	30	15		4.0	Zimski	<input checked="" type="checkbox"/>
Čipovi ultra visokog stupnja kompleksnosti	30	30		4.0	Zimski	<input type="checkbox"/>
Digitalne videokomunikacije	30	15		3.0	Zimski	<input type="checkbox"/>
Distributed Software Development	30	15		3.5	Zimski	<input checked="" type="checkbox"/>
Fizičko projektiranje integriranih sklopova	30	30		4.0	Zimski	<input type="checkbox"/>

ISPITI ☒

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☒

KORISNIČKE OPCIJE ☒

UPIS GODINE ☐

UPIS GODINE

UPIS PREDMETA S VIŠE GODINE

UPIS PREDMETA NA ZAHTJEV

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet

Elective courses

Studomat - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Stop Links

Address

STUDOMAT

Srijeda, 10.10.2007

Razina prava na prehranu >

	Stanje
Matično visoko učilište	Fakultet elektrotehnike i računarstva
Potvrda o prebivalištu	nema
Smještaj u studentskom domu	nema
Posebna prava na prehranu	nema
Trenutna razina prava	1
Prava vrijede od	01.10.2003.
Prava vrijede do	15.10.2008.

ISPITI ☒

KONTINUIRANO PRAĆENJE ☒

POTVRDE ☒

PODACI O STUDENTU ☐

OSOBNİ PODACI

UPISANA VISOKA UČILIŠTA

UPISANE GODINE

RAZINA PRAVA NA PREHRANU

STATUS PREDMETA

PREGLED ŠKOLARINA

KORISNIČKE OPCIJE ☒

UPIS GODINE ☒

ZAVRŠETAK STUDIJA ☒

KRAJ RADA ☒

Internet

Status in Students' nourishment system

Republic of Croatia
University of Zagreb
Faculty of Electrical Engineering and Computing

Zagreb, October 10th, 2007

Number: [REDACTED]

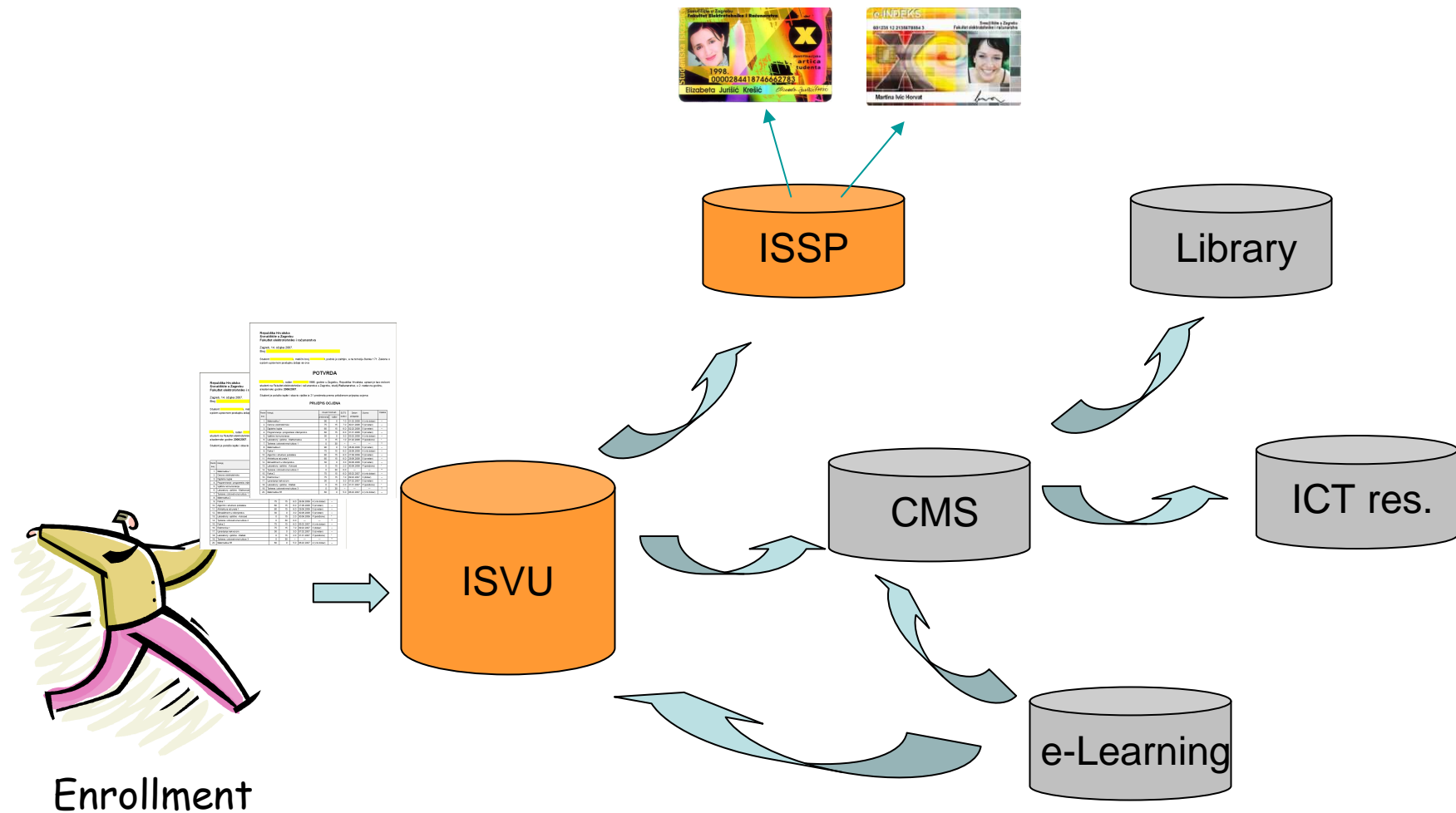
Upon the paragraph 171 of the General procedure act this Faculty issues the following

CERTIFICATE

[REDACTED] born on [REDACTED] Zagreb, Croatia, student of the Faculty of Electrical Engineering and Computing, study of Computing in duration of 9 semesters, enrolled in the 9th semester of study in academic year 2007/2008 as a regular student, passed examinations and completed exercises in the following subjects:

	Subject	Total hours		ECTS credits	Date of examination	Grade	Remark
		Lectures	Exercises				
1.	Linear Algebra	45	30	6.0	02/27/2004	3 (good)	--
2.	Mathematical Analysis I	60	45	7.0	02/03/2004	4 (very good)	--
3.	Physics I	45	45	7.0	06/17/2004	2 (sufficient)	--
4.	Fundamentals of Electrical Engineering I	45	45	7.0	04/19/2004	2 (sufficient)	--
5.	Computer Applications	15	30	3.0	---	---	**
6.	Mathematical Analysis II	60	45	7.0	09/24/2004	3 (good)	--
7.	Physics II	45	45	7.0	07/13/2004	3 (good)	--
8.	Fundamentals of Electrical Engineering II	45	45	7.0	07/09/2004	2 (sufficient)	--
9.	Graphics and Documentation for Engineers	15	30	3.0	06/18/2004	5 (excellent)	--
10.	Physical Education I	0	60	1.0	---	---	**
11.	Programming	30	30	6.0	06/21/2005	2 (sufficient)	--
12.	Mathematical Analysis III	60	45	7.0	09/26/2005	3 (good)	--
13.	Electric Power Engineering	45	30	6.0	02/03/2005	3 (good)	--
14.	Electronics I	60	45	8.0	09/06/2006	2 (sufficient)	--
15.	Algorithms and Data Structures	30	15	4.0	09/23/2005	2 (sufficient)	--
16.	Electrical Measurements	60	60	10.0	09/05/2005	3 (good)	--
17.	Physical Education II	0	60	1.0	---	---	**
18.	Digital Electronics	45	45	7.0	06/23/2005	3 (good)	--
19.	Introduction to Digital Computers	30	30	6.0	07/11/2005	2 (sufficient)	--
20.	Discrete Mathematics	30	30	6.0	07/18/2005	5 (excellent)	--
21.	Electronics II	45	30	6.0	09/29/2006	3 (good)	--
22.	Computer Architecture and Organization	45	45	7.0	02/08/2006	3 (good)	--
23.	Automata, Formal Languages, and Compiler Design I	45	30	6.0	02/09/2006	4 (very good)	--
24.	Introduction to Databases	30	45	6.0	09/05/2006	2 (sufficient)	--

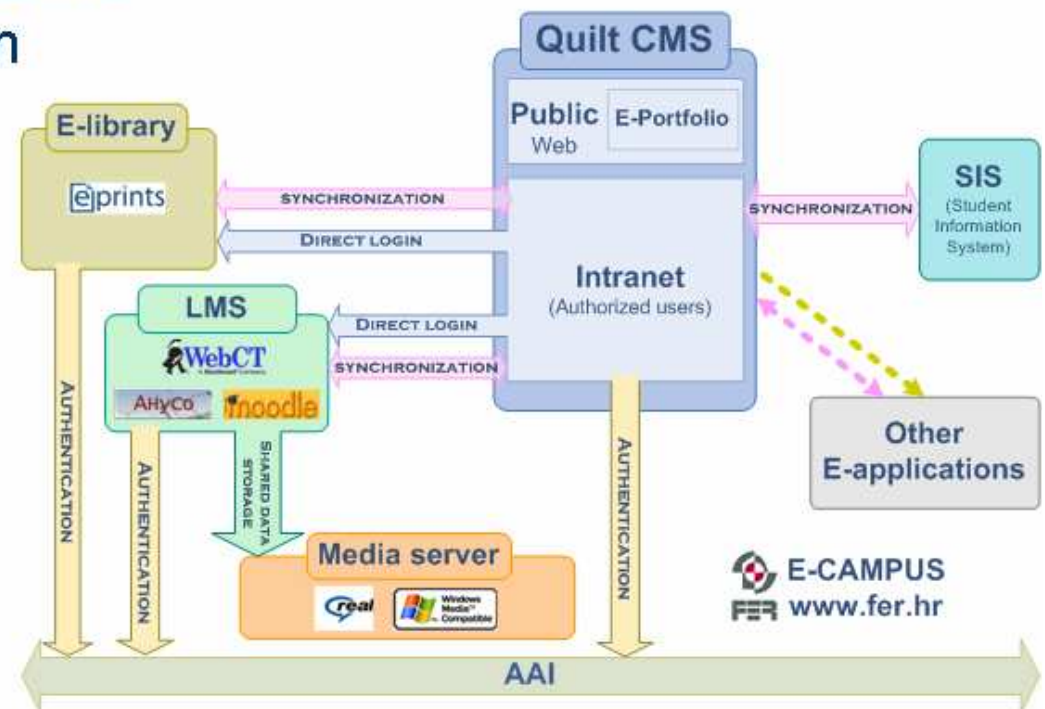
Information Integration - E-Campus



UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

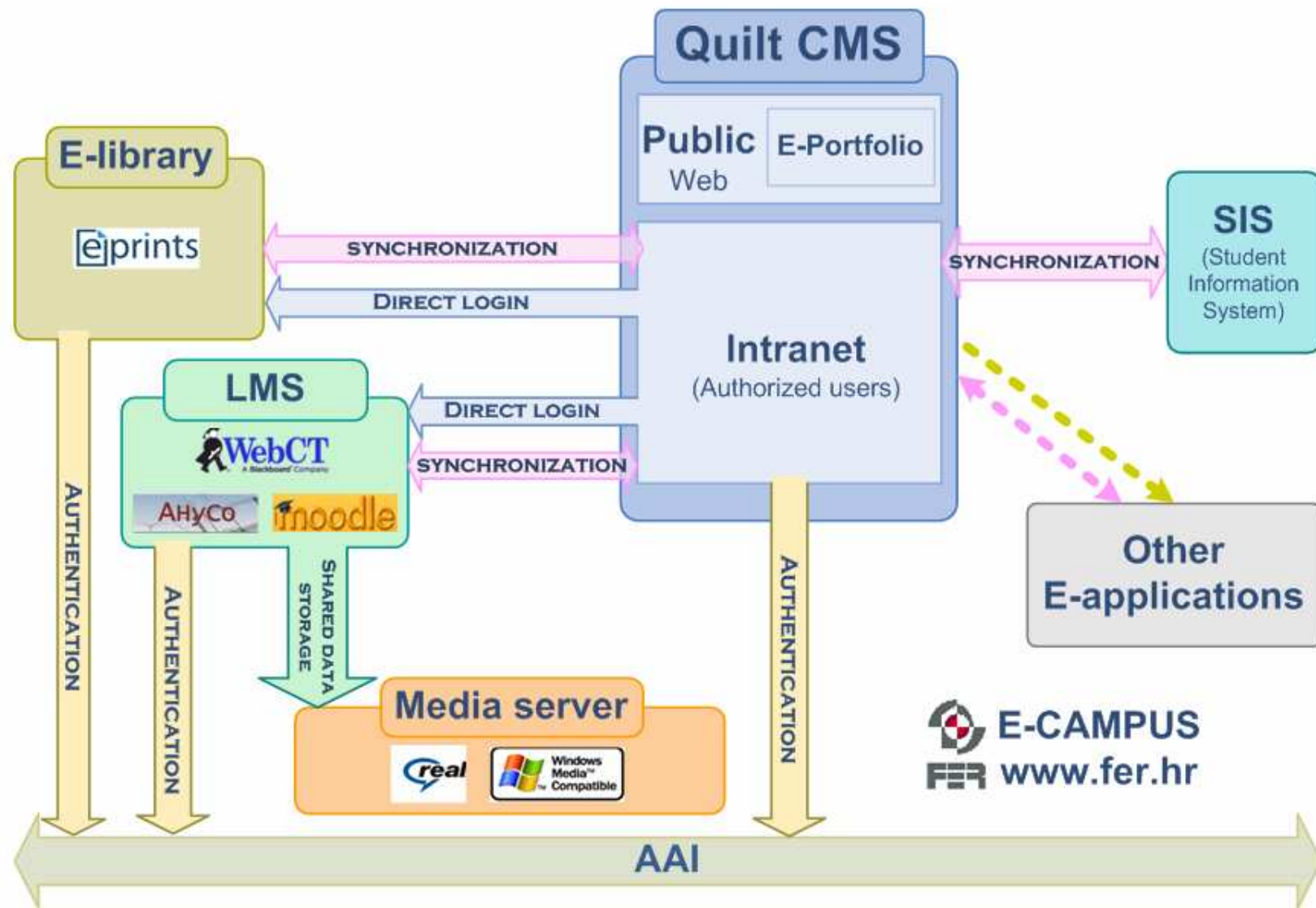
What is E-Campus?

- Complete integration of information, learning and collaboration resources
 - › Content management system
 - › Learning management systems
 - › Student information system
 - › E-Library
 - › E-Portfolio
 - › Media servers
 - › Other E-applications
- Technical catalyst for improving the quality of e-education



UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

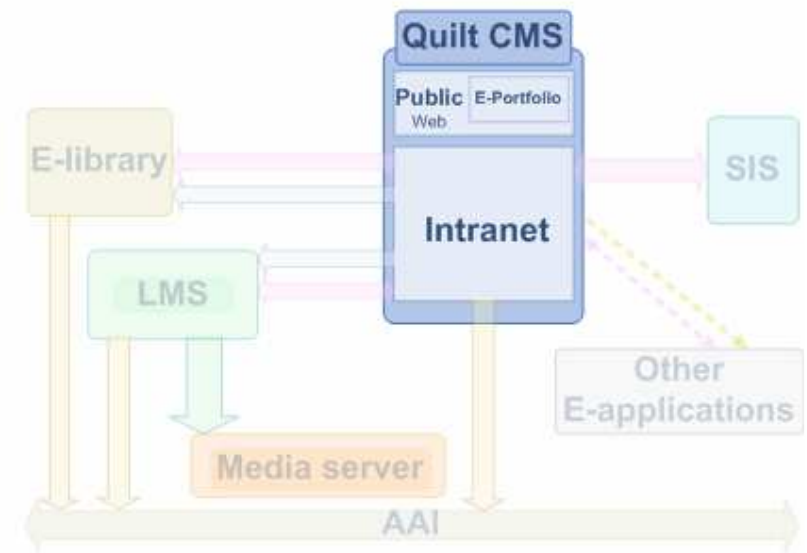
E-campus @ FER



UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

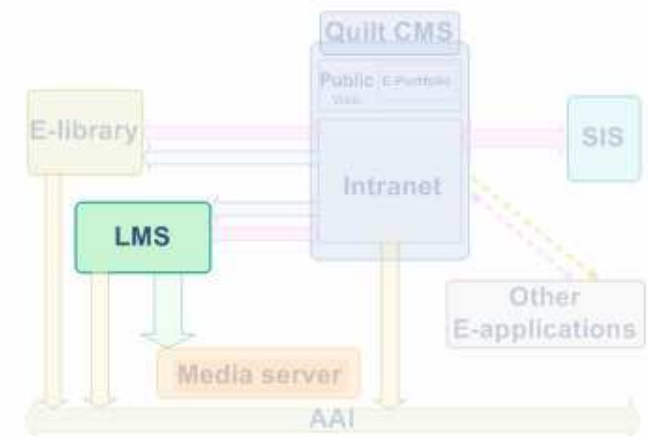
Public and Private Information Space - CMS

- Our own “Quilt” Content management system
- Central part of the E-Campus
- Online editing
 - › Content
 - › News
 - › File and link repository
 - › Polls and advanced surveys
 - › FAQ
 - › Other communication-related modules: forum, chat, etc.



Learning Management Systems

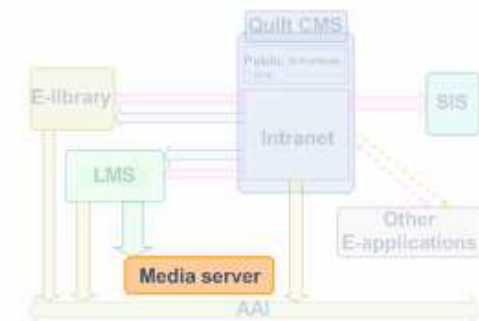
- LMS provides learning environment
- We are currently supporting integration with three advanced Learning management systems:
 - › Moodle
 - › AHyCo
 - › WebCT
- Teaching staff can select most appropriate tool for their teaching style



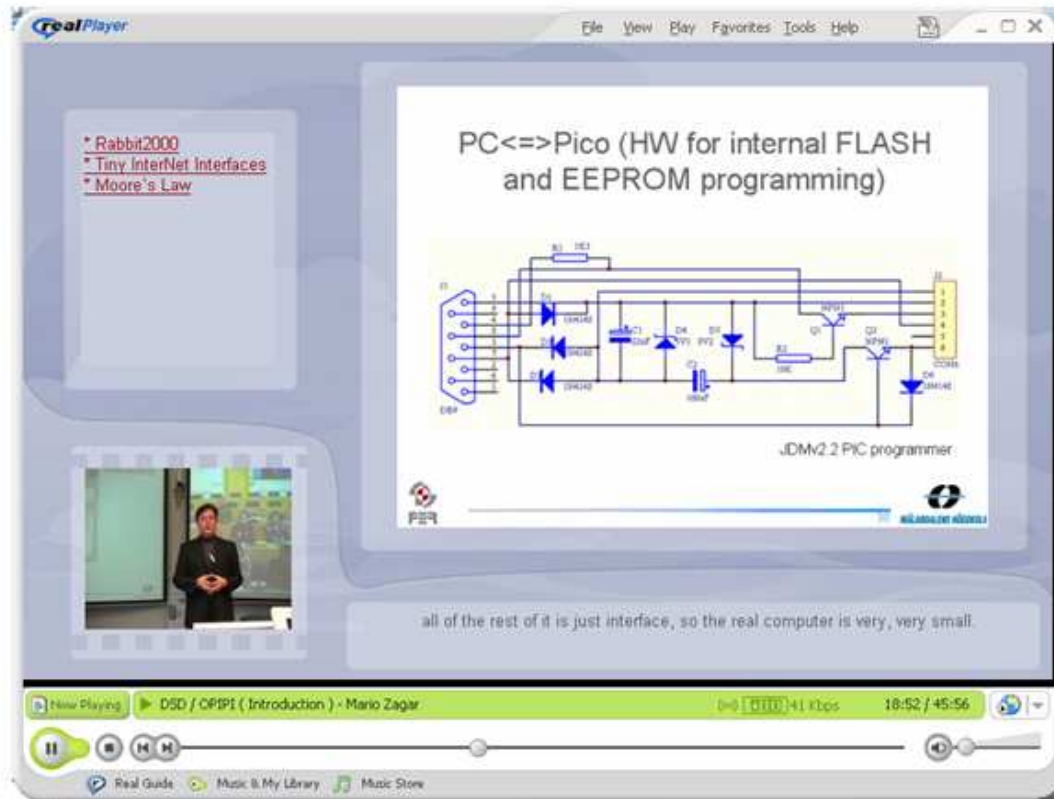
UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

Media Server

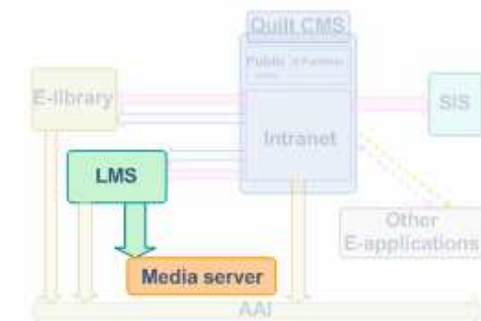
- Stores and delivers all streaming video and audio files relevant to course
- W3C SMIL (Synchronized multimedia integration language)
 - › Audio
 - › Video
 - › Interactive elements (Flash)
 - › Presentation slides
 - › Subtitles
 - › Notes
 - › Important links



SMIL Example



- Example of course presented using SMIL



UNICA SUMIT - Supporting Mobility through Information and communication Technologies

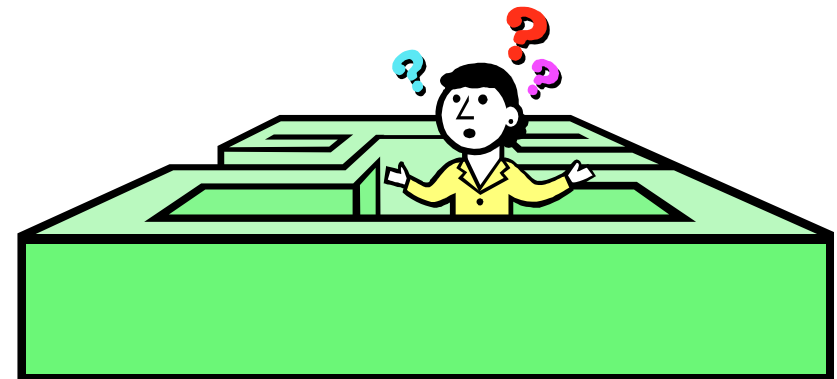
AHyCo

*Adaptive Hypermedia Courseware...
and support for the Bologna process implementation*

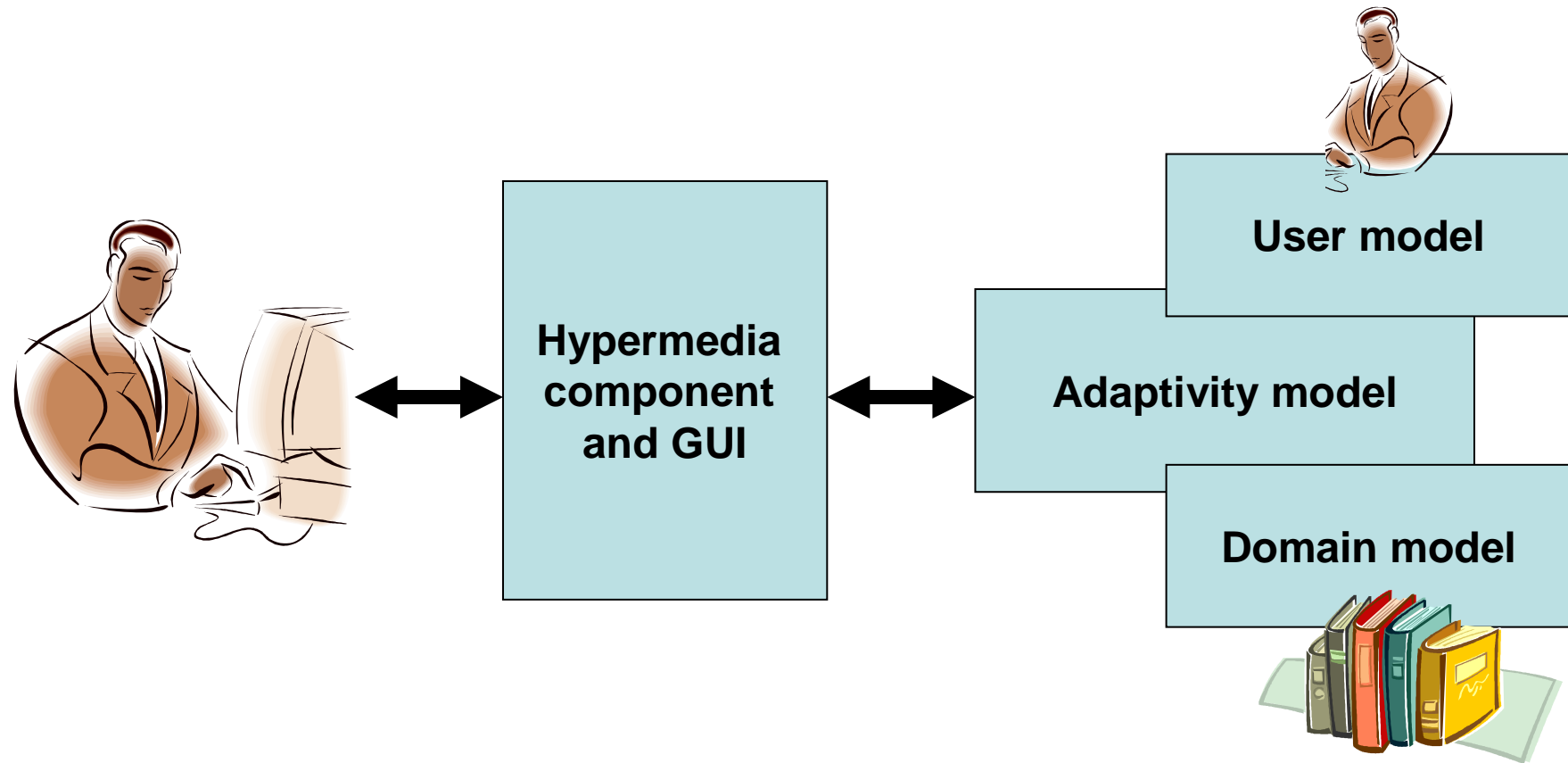
Faculty of Electrical Engineering and Computing
University of Zagreb, Croatia

New paradigms of e-learning

- Adaptive **H**ypermedia **C**ourseware
 - Deals with the available user information (knowledge, affinities, experience etc.)
 - Courseware adapts to its learner
 - Outcome: improved learning

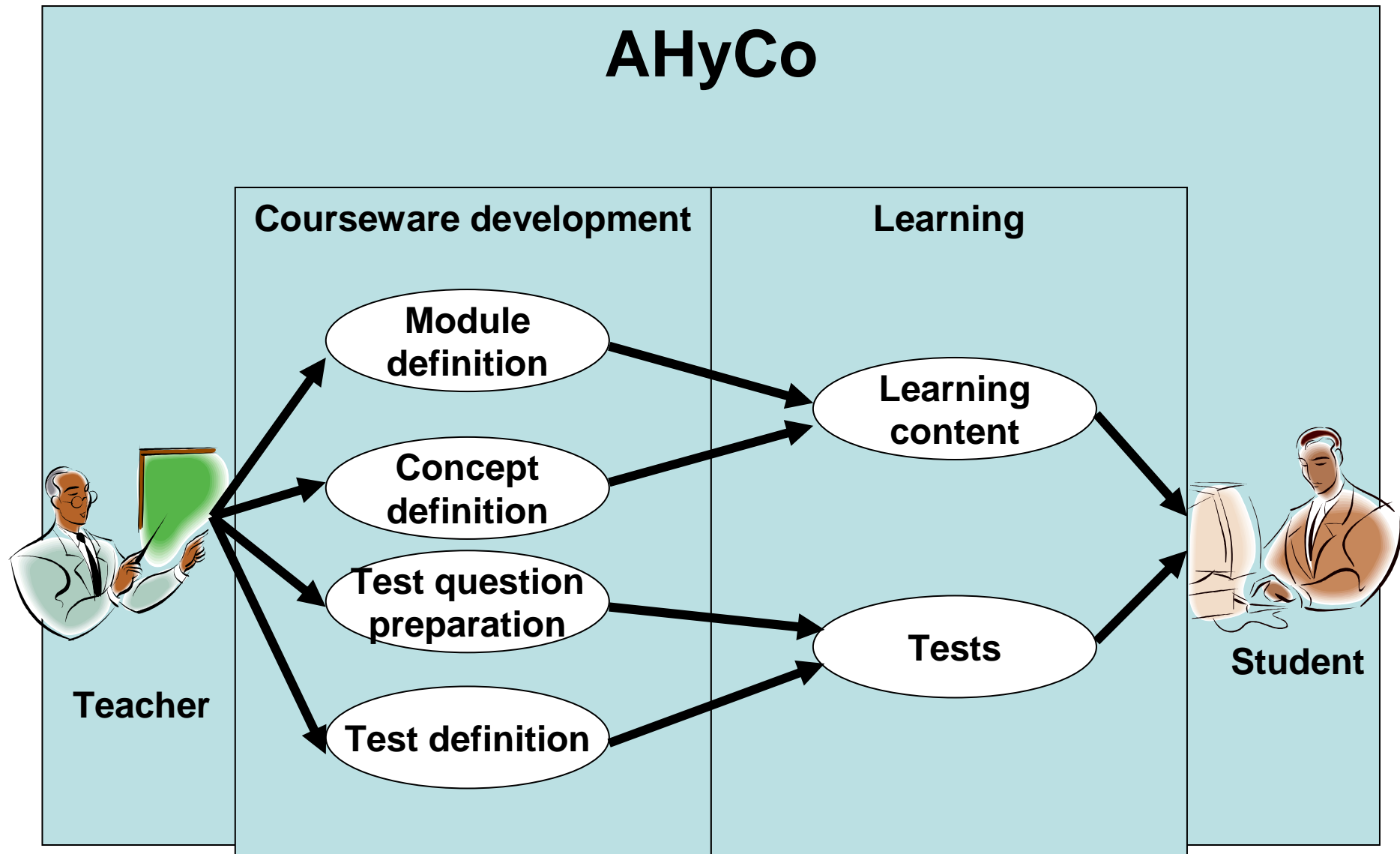


AHyCo




UNICA SUMIT - Supporting Mobility through
Information and communication Technologies

AHyCo from a user's point of view



Taking a test



Proba

Pukljak Zoković, Dubravka
13.03.2007
AHyCo
Upute za trenutnu stranicu

Pitanje
< 4 >
1 točan odgovor

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
- - - - - a - - d c a - - - - -

148:44

> Ocjenjivanje provjere

Zadana je relacija:

r1

mbr	ime	prezime
100	Ivo	Novak
101	Ivo	Novak
105	Mate	Car

Koji je rezultat operacije $\pi_{ime, prezime}(r1)$?

a)

mbr	ime	prezime
	Ivo	Novak

b)


ime	prezime
Ivo	Novak
Mate	Car











c) Operaciju nije moguće obaviti – rezultat nije relacija.

d)


mbr	ime	prezime
100	Ivo	Novak
101	Ivo	Novak

Test results (student view)

<div><div>> Pregled po pitanjima</div><div>> Povratak u glavni izbornik</div></div>					
Provjeru ukupno obavilo pristupnika 6					
Postotak za prolaz 50					
Ostvareni postotak 6					
Uspješnost provjere 					
	Moj rezultat	Min	Max	Prosjeak	Percentil
Broj točnih odgovora	3	0	27	5.5	83.3333
Broj djelomično točnih odgovora	0	0	0	0	100
Broj netočnih odgovora	5	0	5	2.16667	100
Broj neodgovorenih pitanja	22	0	30	22.3333	33.3333
Ostvarena težina	1	0	13.2	2.53333	83.3333

Pitanje	Mogući broj bodova	Točan odgovor	Odgovor	Ostvareni broj bodova	Smješko
1	0.5	e	a	-0.1	
2	0.5	b	b	0.5	
3	0.5	c	c	0.5	
4	0.5	b	-	0	
5	0.5	b	-	0	
6	0.5	c	-	0	
7	0.5	a	-	0	
8	0.5	b	-	0	
9	0.5	a	-	0	
10	0.5	c	a	-0.1	

Results of all tests in a course



Rezultati provjere

Katavić, Marko
13.03.2007
AHyCo
[Upute za trenutnu stranicu](#)

[> Povratak u glavni izbornik](#)

Podaci o provjeri

Područje ispitivanja
Matematika 1

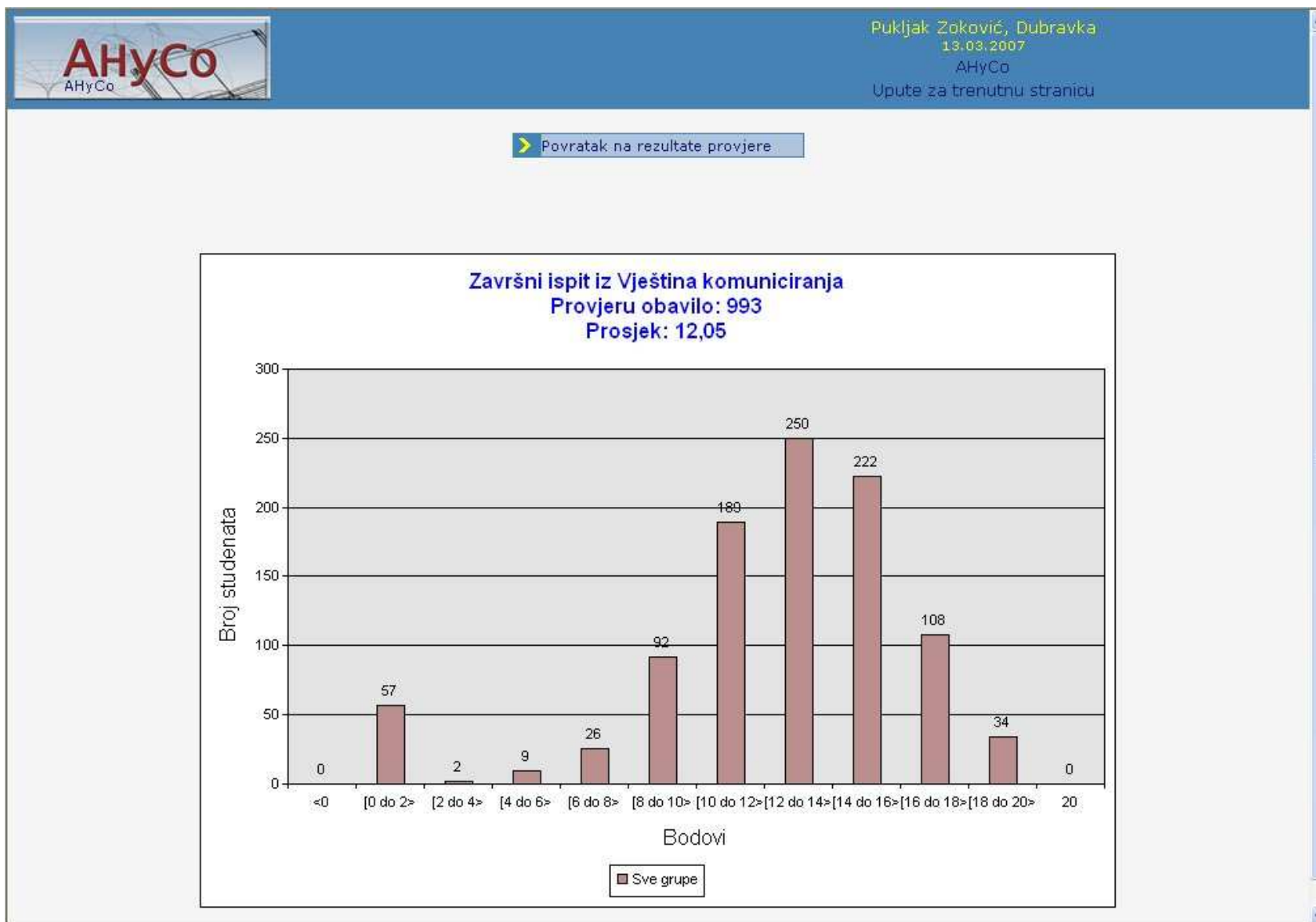
Školska godina
2006./2007. zimski semestar

Do sada zadovoljilo uvjete prolaza: 548

1.MI	2.MI	ZI	PZI	Nastava	DZ	Ukupno	Rang	Ocjena	Može na završni	Ostvario prolaz
13	9	18		6	13	59	331	3	Da	Da

Naziv provjere	Početak pisanja	Kraj pisanja	Mogući broj bodova	Postignut broj bodova	Postotak za prolaz	Postignut postotak	Smješko
Domaće i školske zadaće iz Matematike 1		17.1.2007 10:08:13		13		76	😊
Prvi međuispit iz Matematike 1		30.10.2006 9:28:44		13		65	😊
Završni ispit iz Matematike 1		27.1.2007 8:54:12		18		51	😊
2. međuispit iz Matematike 1		11.12.2006 8:58:15		9		45	😊
Sudjelovanje u nastavi iz Matematike 1		15.1.2007 14:17:35		6		75	😊

Results of one test as seen by teacher



Results of all tests in one course



Rezultati provjera

Pukljak Zoković, Dubravka
13.03.2007
AHyCo
Upute za trenutnu stranicu

- Povratak
- Tisak
- Export podataka ASCII datoteku

JMBAG	Student	1.MI	2.MI	1.DZ	2.DZ	3.DZ	Prisutnost	Aktivnost	Vježbe	ZI	PZI	Grupa	Ukupno	Rang	Ocjena	Može na završni	Ostvario prolaz
0036430867	Ame, Ilirjana (0036430867)	10.5	12.5	8	8	9	5	5	10	16		1.01	84	98	5	Da	Da
0036432146	Andabaka, Katja (0036432146)	10.5	10.5	8	9	6	5	4	8	0	14.5	1.02	75,5	329	4	Da	Da
0036410743	Andrić, Ivan (0036410743)	11	10.5	8	8	8	5	4	10	13.5		1.11	78	242	4	Da	Da
0036430734	Anđelić, Augustin (0036430734)	10	12	0	9	7	5	3	8	9.5		1.04	63,5	712	3	Da	Da
0036427828	Anić, Marko (0036427828)	12	11	8	9	8	5	4	7	4.5		1.07	68,5	555	3	Da	Da
0036433138	Antolković, Ivica (0036433138)	12	8.5	8	6	8	5	4	7	8		1.10	66,5	625	3	Da	Da
0036429063	Antonić, Aleksandar (0036429063)	10.5	10	7	7	6	5	4	8	16		1.06	73,5	405	4	Da	Da
0036410028	Antunović, Branko (0036410028)	11	7		6		5	4	5	13		1.11	51	921	2	Da	Da
0035147660	Antunović, Matijas (0035147660)	12	10.5		7	6	5	3	10	14		1.11	67,5	596	3	Da	Da
0036378400	Arambašić, Goran (0036378400)	10.5	10	8	5	7	5	5	10	13		1.11	73,5	405	4	Da	Da
0036409420	Arandia-Krešić, Andres (0036409420)	8	10.5			8	5	3	8	12.5		1.11	55	869	2	Da	Da
0036371506	Arnautović, Almir (0036371506)	9.5	5.5		9	9	5	5	8	11.5		1.11	62,5	732	3	Da	Da
0036431058	Arsenali, Bruno (0036431058)	12	6.5	5	8	6	5	3	5	12		1.01	62,5	732	3	Da	Da
0036427924	Arsenović, Zoran (0036427924)	7	9	8	7		5	3	8	12		1.04	59	809	3	Da	Da
0036429315	Aščić, Hrvoje (0036429315)	6	11.5	9	8	6	5	3	6	13		1.04	67,5	596	3	Da	Da
0036427716	Aščić, Luka (0036427716)	11	11	10	9	10	5	3	6	14		1.03	79	220	4	Da	Da
0036398412	Avanić, Alan (0036398412)	9	11.5		9	6	5	4	9	13		1.11	66,5	625	3	Da	Da
0036429320	Babajko, Luka (0036429320)	10	10	5	9	9	5	4	9	14		1.08	75	350	4	Da	Da
0036306262	Babić, Daniel (0036306262)	11	0	0	0	7	5	5	10	12		1.11	77	271	4	Da	Da

Conclusions

- Does our information infrastructure support students' mobility?
 - Educational programs are available on public web sites
 - Students can enroll to programs via students' portal (Studomat)
 - Data about enrollment is transferred to other systems and services - incoming students can use them prior to leaving their own university
 - Sharing experiences - using forums, chat, students portals (for example: www.student.hr) before, during and after the visit
 - Records for outgoing students can be printed in English

Additional functionalities to support students' mobility

- Building the multilingual user (student) interfaces
- Enabling on-line applications of incoming students
- Electronic data interchange (student's record, learning agreement, ...)
 - Using web services and electronically signed XML documents
- Defining standard European XML documents (XML Schemes) for data interchange
 - Maybe they already exist?