



Co-funded by the
Erasmus+ Programme
of the European Union



Imagine students initiating digital exchange of their achievement records across borders in all of Europe



Uddannelses- og
Forskningsministeriet



Swedish Council for
Higher Education



EAIE 15. September 2016

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EU's strategic goals

EU policy on learner mobility in HE

Target

- "By 2020, at least **20%** of higher education graduates should have had a period of study or training abroad"

Mobility 'environment'

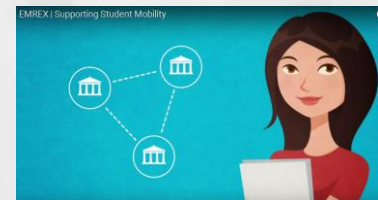
- **Recognition & ECTS users' guide + Bologna Process + Council Recommendation (2011) + Mobility Scoreboard**

Facilitate transfer of information

- by developing sustainable, quick and user-friendly **electronic transfer of data**

Financial support

- **Erasmus+** mobility inside and outside of EU, Strategic Partnerships, Forward Looking Projects





Generation Z meets ancient academic world



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iPad and google

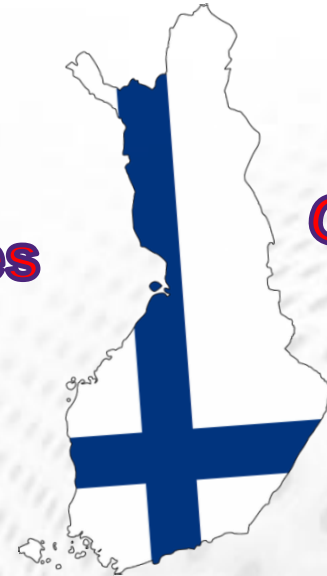
HEI in the cloud

Student mobility

Not eligible to apply



Overlapping studies
Delays, Costs



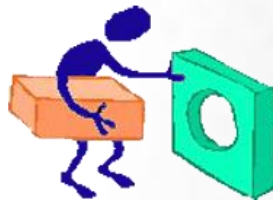
Office hours
9.00-9.05

Forgeries

Degree mills

Printed transcripts

Typing errors



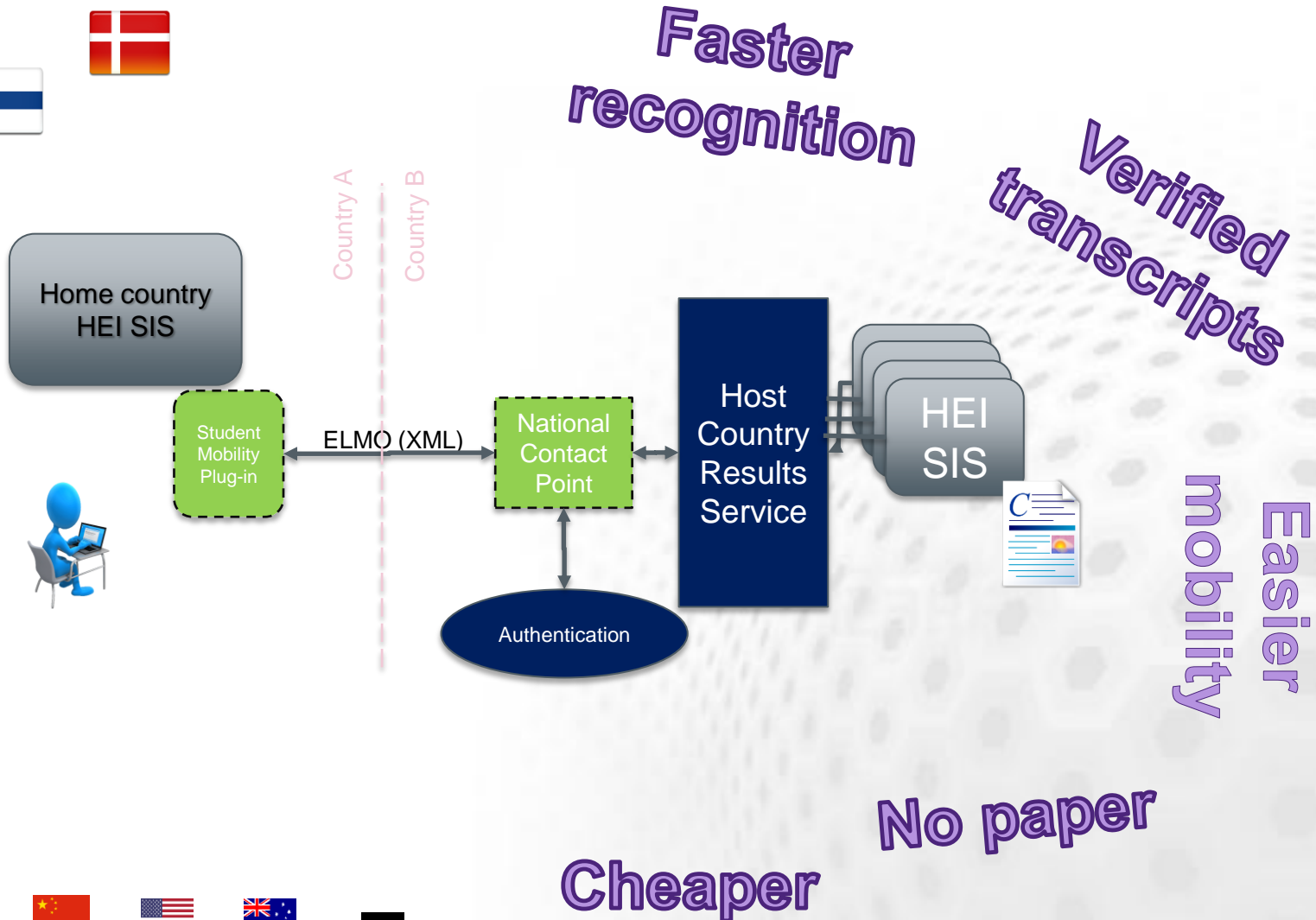
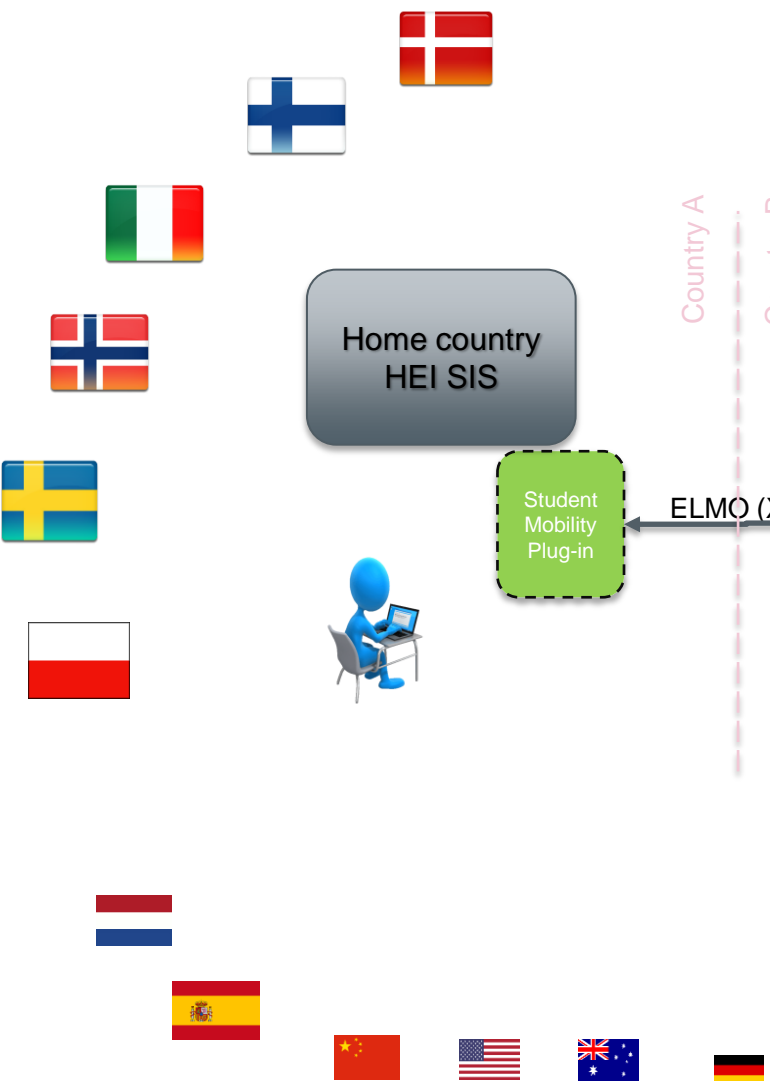
Incompatible data



Student retrieves his achievement data electronically with EMREX



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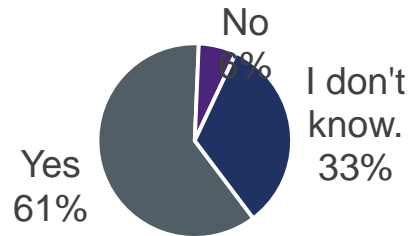


Ongoing live field trial



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Would you use EMREX?



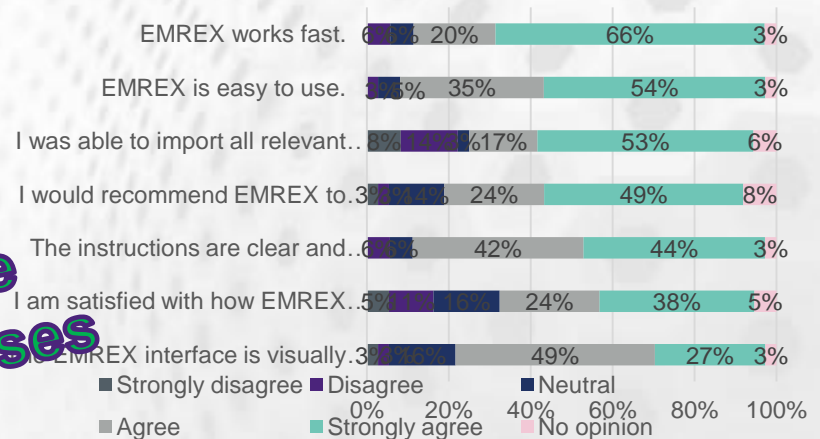
- Live EMREX production systems!
- Exchange students from four (soon six) countries

“Very quick and straightforward to use”

“The courses etcetera are all in Swedish”

“I would like to see some extra information on courses”

Real user experiences





The EMREX Vision



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Seamless
admission

For any
purpose

“My Data”

Global network

A LITTLE HELP
PLEASE?



Global standard
for exchanges

Automatic
recognition

No paper
anywhere



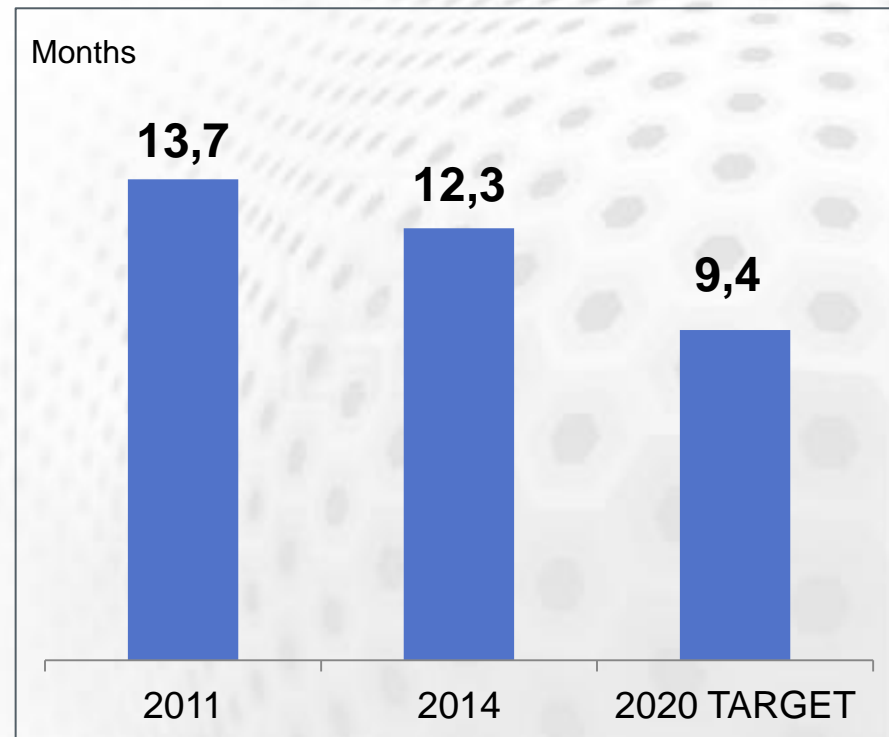
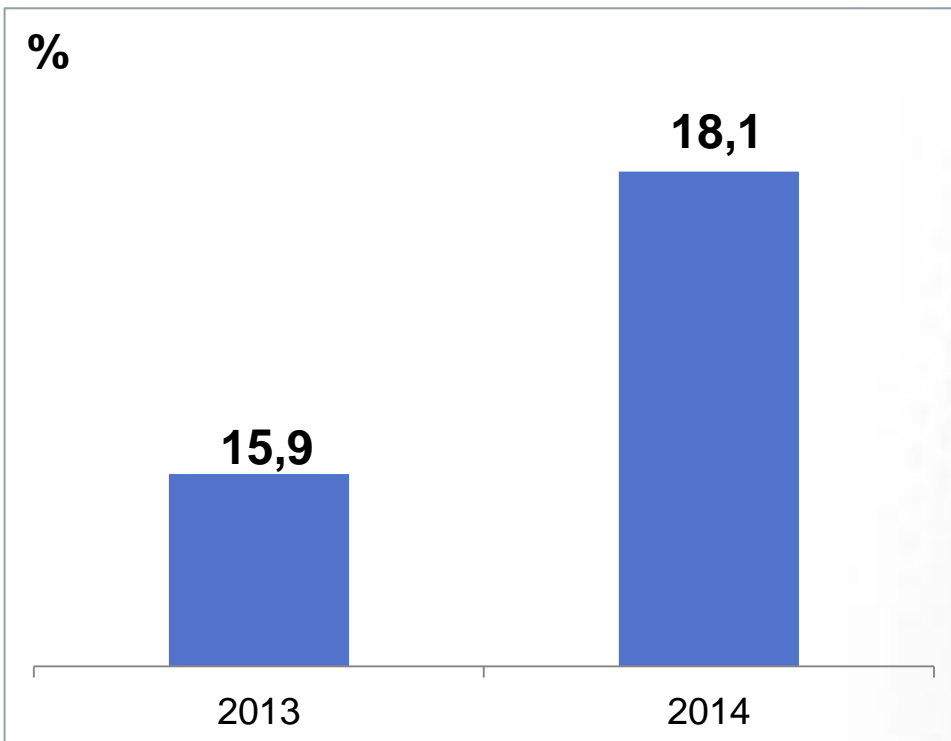
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Higher Education Policy in Denmark

- Quality, relevance and faster completion

Graduates from Danish Higher Education Institutions who have had study or training period abroad (at least 14 days)

Number of months the prescribed period of study is exceeded at Danish Universities





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"Digital Denmark"

The Digital Student:

- Webbased guidance on educational programmes
- Digital application to higher educational programmes
- Digital application for state grants and loans
- Digital education
- Digital examination
- Digital communication with students

Danish students expect digital solutions when they go abroad!





EMREX in Denmark



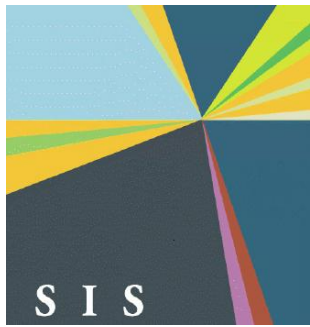
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Ministry of Higher Education
and Science – Denmark



EMREX - Danish National Contact Point



The logo for STADS+, featuring the word 'STADS' in large, bold, blue letters with a white outline, followed by a large orange plus sign.

- 8 University colleges
- 9 Business academies (by 2017)
- 3 Schools of Marine and Technical Engineering
- 1 Maritime college and 1 Maritime academy

- 8 universities (4 part of Field Trial so far)
- 3 HEIs within fine arts
- 6 HEIs under the Ministry of Culture



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VIDEO

**students about mobility, recognition
and EMREX**



Arkady Kubickiego

Kościół Akademicki
św. Anny

Rynek
Mariensztański

skwer
Radiowej
Rodziny
Matysiaków

Biblioteka Uniwersytecka
w Warszawie

Pałac Prezydencki

skwer
Zgrupowania
AK "Róg"

skwer ks. Jana
Twardowskiego

Uniwersytet
Warszawski

park
Kazimierzowski

Plac Marszałka
Józefa Piłsudskiego

Hotel Sofitel
Victoria Warszawa

Pałac Uruskich

Klub Harenda

Akademia Sztuk
Pięknych w Warszawie

Kościół Świętego Krzyża

Teatr Polski im. Arnolda
Szyfmana w Warszawie

Pomnik Mikołaja
Kopernika

EMREX at the University of Warsaw (POLAND)



How to scale up from UW to Poland?

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USOS - One common Student Information System for 50 HEIs
Norway's solution is better (central repository)

Transcript of records modern version of the tower of Babel



The Tower of Babel
Pieter Bruegel the Elder 1563

How transcripts differ

- All grades vs passing grades?
- All grades of the course vs the last grade?
- Modules vs module components
- Grading scale
- Grading culture
- Grade conversion
- Calculating grade average (if at all)

Common language is needed
understandable by

- People (PDF)
- Student Information Systems (XML)



Internal discussion



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Sweden

→ We never calculate grade averages. We offer grading tables for each course. The grade connected to the module is just text which will be put in the degree certificate. Which parts of the module can be taken at various semesters and all parts of the module must be passed to get the total grade of the module and to use the course in the degree.

→ All achievements are presented in a Swedish transcript even though the module as a whole is not completed.

→ This has actually been changed. Uncompleted courses will NOT be transferred, since all components are required for the course to be completed.

Finland

→ The process varies in Finland. Some HEIs only record subcomponents until the whole module is complete. But some do and then it ends up sent to Virta.

→ Grade for the whole module is calculated based on rules concerning that course, so there is no general rule for it.

Norway

→ Results for part of a module will not be a part of the transcript until the whole module is complete. If the module is complete, the results for the submodules may or may not be part of the transcript (varies from module to module).

→ Only passed results will be part of a transcript.

**Strictly confidential
don't read**

Climate in Change				7.5	VG	2007-06-26	2
Grading table:	Grade	Number	Percentage				
	VG	7	22,6				
	G	24	77,4				
Report Seminar				(1.5)	VG	2007-06-26	
				(6.0)	G	2007-06-26	
Creative Writing				15.0	G	2007-08-23	3
Grading table:	Grade	Number	Percentage				
	G	70	100,0				
Creative Writing				(15.0)	G	2007-08-23	
Personal Development in Work from a Gender Perspective and Applied Knowledge About Working Conditions				7.5	G	2007-10-19	3
Grading table:	Grade	Number	Percentage				
	G	10	100,0				
Personal Development in Work from a Gender Perspective				(4.5)	G	2007-06-19	
Work Environment Investigation				(3.0)	G	2007-10-19	
Introduction to Intercultural Communication				7.5	G	2010-01-29	3
Grading table:	Grade	Number	Percentage				
	G	21	100,0				

Transcript of Records from Sweden

Intercultural Communication

Spanish I

Grading table: Grade VG G

Written Proficiency Contemporary Spanish-speaking Contemporary Spanish-speaking Oral Proficiency

Validate the Civic registration number

Credits obtained in unfinished courses	Credits	Grade	Date	Note
English for Academic Administration (Focus Written Skills)	(5.0)			
Portfolio	2.0	G	2010-06-16	3
Spanish II	(30.0)			
Oral Proficiency	7.5	G	2011-03-01	2
Total sum:		92.0 credits		

The above is an excerpt from the register of student records.

Notes:

Grading systems:

- 1) 5 Pass with distinction, 4 Pass with credit, VG Pass with distinction, 3 Pass, G Pass
- 2) VG Pass with distinction, G Pass
- 3) Pass course only, G Pass

Grading table is only available for courses with grades awarded over a period of at least 2 years

This transcript contains credits converted 1 July 2007.

60 credits represent a full academic year.

INFORMATION ON THE RESULTS GAINED

Courses by didactic cycles	Language of instruction	Type/No. of hrs	Grade	ECTS
<i>Winter semester 2013/2014</i>				
(1000-111bGA1a) <i>Linear algebra and geometry I</i>		PL wyk 30 / cw 60	5	8
(1000-111bAM1a) <i>Mathematical analysis I.1</i>		PL wyk 60 / cw 60	3,5	10
<i>Summer semester 2013/14</i>				
(1000-212bAKS) <i>Computer and Network Architecture</i>		PL wyk 30	3 4,5	2.5
(1000-00HM2-OG) <i>History of mathematics II</i>		PL wyk 30	3	3
(1000-112bGA2a) <i>Linear algebra and geometry II</i>		PL wyk 60 / cw 60	5	10
(1000-212bPO) <i>Object-Oriented Programming</i>		PL wyk 30 / cw 30 / lab 30	3,5	7.5
<i>Winter semester 2014/2015</i>				
(1000-213bASD) <i>Algorithms and Data Structures</i>		PL wyk 30 / cw 30 / lab 30	5	7
(1000-213bBAD) <i>Databases</i>		PL wyk 30 / lab 30	3	5.5
(1000-223bJNP1) <i>Languages and Tools for Programming I</i>		PL lab 30	3 5	2
(1000-213bRPS) <i>Probability Theory a</i>				
<i>Summer semester 2014/15</i>				
(1000-212bMD) <i>Discrete Mathematics</i>				
(1000-222bIPP) <i>Individual Programm</i>				
(1000-224bJNP2) <i>Languages and To</i>				
(1000-214bJAO) <i>Languages, automa</i>				
(1200-EJIP-OG) <i>Nuclear energy and</i>				
(4023-O-PL YW2) <i>Swimming – interm</i>				
<i>Winter semester 2015/16</i>				
(1000-2M12KI1) <i>Cryptography for Co</i>				
(0000-ANGB2EC) <i>Examination in Eng level</i>				
(1000-2N03TI) <i>Information Theory</i>				

Transcript of Records from Poland

Courses by didactic cycles	Language of instruction	Type/No. of hrs	Grade	ECTS
<i>Winter semester 2015/16</i>				
(1000-225bJNP3) <i>Languages and Tools for Programming III</i>		PL cw 30	4,5	2
(1000-2N00PLO) <i>Logic Programming</i>		PL wyk 30 / lab 30	5	6
(1000-215bMNU) <i>Numerical Methods</i>		PL wyk 30 / cw 15 / lab 15	3,5	5
(1000-215bSWP) <i>Program Semantics and Verification</i>		PL wyk 30 / cw 30	4	5
(1000-215bBSK) <i>Security of Computer Systems</i>		PL wyk 30 / lab 30	3,5	5
(1000-2N09ALT) <i>Text algorithms</i>		EN wyk 30 / cw 30	3	6
<i>Spring semester 2015/16</i>				
(1000-216bJPP) <i>Programming Languages and Paradigms</i>		PL wyk 30 / lab 60	5	7
<i>Academic year 2015/16</i>				
(1000-2L5ZPP) <i>Team programming project</i>		PL psem 60	5	8
ECTS in total:				139,5

Description of class type codes

<i>cw</i>	<i>class</i>
<i>egz</i>	<i>examination</i>
<i>lab</i>	<i>lab</i>
<i>psem</i>	<i>proseminar</i>
<i>wf</i>	<i>physical education</i>
<i>wyk</i>	<i>lecture</i>

Grades outside brackets are course grades, grades inside brackets are grades for the classes, vertical bar separates grades for various classes, semicolon separates grades on various exam reports, space separates grades on the same exam report, order of grades on a report follows order of exam sessions.

ZAL (zaliczenie) = non-graded pass, NZAL (niezaliczenie) = fail, NK (nie klasyfikowany) = not qualified, — = no grade in the examination protocol.

ECTS credits: 1 full academic year = 60 credits.



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LIVE DEMO

(if works skip the following 5 slides)



Choosing exchange country at Finnish student portal



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Supporting Student Mobility (EMREX)



Hi and welcome to Emrex!

Welcome! With this service you can retrieve your achievement records from studies at another university or college. Importing your records is a quick and easy process.

1. Select the country from which you want to retrieve your achievement records
2. Use the credentials from the host university where you studied to log into the system where your results are stored.
-- You will be able to import results from all the universities you studied at in that country (if part of EMREX)
3. Select the achievement records you want to import
4. Review and confirm the selection. The records will be sent to your home university and you will be sent a copy if you'd like.
5. Afterwards you will be asked to answer a few questions about the tool to help us develop it further.

Choose Your Exchange Country:

- | | | |
|--------|----------------|--|
| Select | [Test] Finland | |
| Select | [Test] Italy | |
| Select | [Test] Norway | |
| Select | [Test] Poland | |
| Select | [Test] Sweden | |

So let's get started by selecting a country!



Logging to the student portal of the University of Warsaw



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USOS web

NEWS | DIRECTORY | MY USOSWEB | **STUDENT'S SECTION** | STAFF SECTION | COMMON SECTION

Ulrychów | Czyste | **WARSAWA** | Sołec | Saską Kępa | Przyczółek Grodzki | Śródmieście Południowe | Kępa Godawska | Osiedle Jantar

University of Warsaw


Send your achievements data


 Look out. You are about to send your personal data, along with some information on your grades, courses and study programmes, to an external application.

[Sign in to continue](#)

ADDITIONAL INFORMATION

You will still be allowed to select the courses to be included in the report after you sign in.



 University of Warsaw

You're using a **beta** version of the student mobility data exchange service.

This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office.



Selecting results at the student portal of the University of Warsaw



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USOS web

[NEWS](#)
[DIRECTORY](#)
[MY USOSWEB](#)
[STUDENT'S SECTION](#)
[STAFF SECTION](#)
[COMMON SECTION](#)

INTRODUCTION

REGISTRATIONS

- ▶ calendar
- ▶ cart
- ▶ for courses
- ▶ direct for groups
- ▶ group preferences
- ▶ for exams
- ▶ token registrations

MY STUDIES

- ▶ tests
- ▶ marks
- ▶ [emrex]
- ▶ [hidden]
- ▶ linkage
- ▶ POL-on
- ▶ decisions
- ▶ promotions
- ▶ dean's groups
- ▶ rankings
- ▶ stipends
- ▶ diplomas

Send your achievements data

Look out. You are about to send your personal data, along with some information on your grades, courses and study programmes, to an external application.

The report which we are going to send to the external application will include the information on your grades and other achievements related to the courses selected below.

[Select/deselect all](#)

Winter semester 2013/2014

Course	Grades	Hours of classes	ECTS credits
<input checked="" type="checkbox"/> Linear algebra and geometry I 1000-111bGA1a	5	60 hours CW 30 hours WYK	8
<input checked="" type="checkbox"/> Mathematical analysis I.1 1000-111bAM1a	3,5	60 hours CW 60 hours WYK	10

Summer semester 2013/14


Course	Grades	Hours of classes	ECTS credits
<input checked="" type="checkbox"/> Computer and Network Architecture 1000-212bAKS	3 4,5	30 hours WYK	2.5
<input checked="" type="checkbox"/> History of mathematics II 1000-00HM2-OG	3	30 hours WYK	3
<input checked="" type="checkbox"/> Linear algebra and geometry II 1000-112bGA2a	5	60 hours CW 60 hours WYK	10
<input checked="" type="checkbox"/> Object-Oriented Programming 1000-212bPO	3,5	30 hours WYK 30 hours CW 30 hours LAB	7.5




Exporting results from the University of Warsaw



ERASMUS+

NEWS DIRECTORY MY USOSWEB **STUDENT'S SECTION** STAFF SECTION COMMON SECTION



University of Warsaw

INTRODUCTION


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- ▶ promotions
- ▶ dean's groups
- ▶ rankings
- ▶ stipends
- ▶ diplomas

Send your achievements data



By clicking "Export" you will send to an external application your personal data, along with selected information about your assessment, subjects and programs of study.

You may see files that will be sent:


- PDF file (not digitally signed),
- EMREX-ELMO file (digitally signed).

CONFIRMATION

University is not related to the person or institution to which the report will be sent, and is not responsible for the way your data will be handled by the recipient. We recommend to continue only if you trust the page which has brought you here.

I understand these warnings and want to continue (required)

[Export](#) [Cancel](#)



University of Warsaw

You're using a **beta** version of the student mobility data exchange service.

This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office.

EMREX-ELMO XML

(you don't have to understand it, but your SIS should)

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- <elmo xmlns="https://github.com/emrex-elmo-schemas/tree/v1">
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Problems to be solved



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- How to collect all student grades in the Student Information System on time for EMREX to fetch?
- How students are authorized (how long accounts are active)?
- How to process PDF/XML transferred by a student to home institution's Student Information System?
- Which students benefit:
 - **Outgoing** – if you implement EMREX client.
 - **Incoming** – if you add national/institutional contact point.
- It's great that you are ready, but your partners should also join.



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Discussion in plenum

- Do you think your university is ready for EMREX?
- Where do you see benefits of EMREX?
- Do we need changes in policies to accept EMREX?



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Inputs from the audience





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Why EMREX?

Because

- ➔ students own their academic achievements
- ➔ students are mobile
- ➔ students want to do it in a digital way

Your feedback is appreciated!

Evaluate this session:

- Open the EAIE Events App
- Go to 'Schedule' and find this session
- At the bottom of the session description you'll see 'Resources'
- Click 'Evaluate this session' to answer a few questions

