Nazwa modułu (przedmiotu): **Scripting languages and their application**		
Kierunek: **Informatyka** Specjalność: **-** Tryb: **stacjonarne**		Kod modułu (przedmiotu): **6K** Język wykładowy: **polski**
Obszar studiów: **techniczny**	Profil : **ogólnoakademicki**	Tytuł zaw. absolwenta: **magister**
Rodzaj modułu (przedmiotu) **Obowiązkowy**	Poziom kwalifikacji: **II stopnia**	Rok: **I** Semestr: **II** Semestr: **letni**
Rodzaj zajęć: **Wyk. Ćwicz. Lab. Sem. Proj.**	Liczba godzin: **15, 0, 30, 0, 0**	Liczba punktów: **5 ECTS**
Nazwa jednostki prowadzącej przedmiot: **Wydział Elektryczny, Instytut Informatyki**		
Osoba odpowiedzialna za moduł (przedmiot): **dr inż. Łukasz Piątek**		
Osoba(y) prowadząca(y) zajęcia: **dr inż. Łukasz Piątek**		

OBJECTIVES

C1. Aquaintance with PHP programming language.

C2. Learning syntax of PHP programming language.

C3. Aquaintance with XSTL programming language.

C4. Learning syntax of XSTL programming language.

C5. Aquaintance with Python programming languages.

C6. Learning syntax of Python programming language.

C7. Achieve Python Graphical user interface programming skills.

PRELIMINARY REQUIREMENTS

1. Basic knowledge of programming concept involving conditional expressions and loops.
2. Basic computer skills.
3. Knowledge of English.

EDUCATIONAL EFFECTS

EK 1 – Student can run a program in PHP on a remote http server.

EK 2 – Student can employ iterative and conditional statements in PHP.

EK 3 – Student can utilize tables in PHP.

EK 4 – Student know the syntax of XSTL programming language and utilize the XSTL to XML files processing.

EK 5 – Student have knowledge of Python programming language syntax.

EK 6 – Student can utilize Python language to create functional graphical user interfaces.

PROGRAMME

Lectures

contents	hours
W 1 – The concept of scripting language. Overview of scripting languages in use. Characteristics of selected scripting languages.	**1**
W 2 – Essentials of PHP programming language syntax. Conditional statements in PHP. String processing functions in PHP library.	**1**
W 3 – Tables in PHP. Table processing functions. Loops in PHP programming language.	**1**
W 4 – User interaction in PHP. Passing user input with POST and GET methods.	**1**
W 5 – Objective programming in PHP.	**1**
W 6 – The XML markup language. Transforming XML documents with XSTL scripting language.	**1**
W 7 – Essentials of Python programming language syntax. String processing functions in Python library.	**1**
W 8 – Tables in Python language .	**1**
W 9 – Conditional and iterative statements in Python programming language.	**1**
W 10 – Libraries for graphical user interface programming in Python.	**1**
W 11 – Glade – the universal graphical user interface builder.	**1**
W 12 – The PyGTK library.	**1**
W 13 – Linking graphical user interface components with Python code.	**1**
W 14 – Selected graphical user interface components and their applications in Python programming language.	**1**
Test	**1**
SUM	**15**

LAB

contents	hours
Test on preliminary requirements	**0,5**
L 1 – Simple program in PHP and its execution on a remote http server.	**1,5**
L 2 – Conditional statements. String processing functions in PHP library	**2**
L 3 – Tables in PHP. Table processing function. Using loops in processing data in tables.	**2**
L 4 – A simple logging component in PHP.	**2**
L 5 – Objective programming in PHP.	**2**
L 6 – XML document processing with XSTL language.	**2**
L 7 – Simple programs in Python.	**2**
L 8 – Conditional statements in Python programming language. String processing functions.	**2**
L 9 – Tables in Python programming language.	**2**
L 10 – Loops in Python programming language.	**2**
L 11 – Graphical user interface creation in Glade envirement – part 1	**2**
L 12 – Graphical user interface creation in Glade envirement – part 2	**2**
L 13 – File input and output operation in Python.	**2**
L 14 – Linking Python code with graphical user interface components. Realisation of simple file database application.	**2,5**
Test	**1,5**
SUM	**30**

BIBLIOGRAPHY

1. Luke Welling, Laura Thomson: **PHP i MySQL. Tworzenie stron WWW, Wydawnictwo Helion, Gliwice 2009**
2. Mark Lutz: Python – wprowadzenie wydanie IV, Wydawnictwo Helion, Gliwice 2009
3. Przemysław Kazienko, Krzysztof Gwiazda XML na poważnie, Wydawnictwo Helion, Gliwice 2002
4. http://www.php.net/manual/pl/
5. http://python.org/doc/