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|---|---|---|---|---|
| **Course abbreviation:** | KPV/PVT2 | | **Page:** | 1 / 4 |
| **Course name:** | Computer Skills 2 | | | |
| **Academic Year:** | 2023/2024 | | **Printed:** | 03.06.2024 08:01 |

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|---|---|---|---|---|---|
| **Department/Unit /** | KPV / PVT2 | | | **Academic Year** | 2023/2024 |
| **Title** | Computer Skills 2 | | | **Type of completion** | Pre-Exam Credit |
| **Accredited/Credits** | Yes, 3 Cred. | | | **Type of completion** | |
| **Number of hours** | Tutorial 3 [Hours/Week] | | | | |
| **Occ/max** | Status A | Status B | Status C | **Course credit prior to** | NO |
| **Summer semester** | 52 / - | 0 / - | 12 / - | **Counted into average** | NO |
| **Winter semester** | 0 / - | 0 / - | 0 / - | **Min. (B+C) students** | 10 |
| **Timetable** | Yes | | | **Repeated registration** | NO |
| **Language of instruction** | Czech | | | **Semester taught** | Summer semester |
| **Optional course** | Yes | | | **Internship duration** | 0 |
| **Evaluation scale** | S\|N | | | | |
| **No. of hours of on-premise** | | | | | |
| **Auto acc. of credit** | Yes in the case of a previous evaluation 4 nebo nic. | | | | |
| **Periodicity** | K | | | | |
| **Substituted course** | None | | | | |
| **Preclusive courses** | N/A | | | | |
| **Prerequisite courses** | N/A | | | | |
| **Informally recommended courses** | N/A | | | | |
| **Courses depending on this Course** | N/A | | | | |

### Course objectives:

The main goal of the topic is to provide information for the efficient work with the spreadsheet program in the field of advanced calculation.

### Requirements on student

It is necessary to process semester work including processing of the topic using a spreadsheet to obtain the credit. The semester work includes the calculation and the interpretation of its results.

### Content

The course is focused on the use of advanced features for processing bulk documents and advanced features for processing and analyzing data using a spreadsheet application with the use of the MS Office (MS Word and MS Excel).

1. Organization of the course
2. MS Word - basics repetition, mail merge - generating na envelope
3. MS Word - mail merge - template and merge, developer - form, tabs, controls, editing large documents
4. MS Excel - basics repetition
5. MS Excel - custom formatting using condition, pivot tables + charts, charts
6. MS Excel - mathematical and statistical functions
7. MS Excel - search and database functions
8. MS Excel - text and time functions
9. MS Excel - estimations, hypothesis testing
10. MS Excel - correlation, regression

## Fields of study

Studentům jsou k dispozici studijní materiály umístěné ve vytvořeném týmu v rámci aplikace MS Teams a kurzu v LMS Moodle. Tyto materiály jsou určeny pro osvojení teoretických a praktických poznatků využitelných při řešení příkladů realizovaných během cvičení.

## Guarantors and lecturers

- **Guarantors:** Doc. Ing. Pavel Raška, Ph.D. (100%)
- **Tutorial lecturer:** Ing. Tomáš Broum, Ph.D. (100%), Ing. Bc. Miroslav Malaga, Ph.D. (100%), Doc. Ing. Pavel Raška, Ph.D. (100%)

## Literature

- **Basic:** Pecinovský Josef, Pecinovský Rudolf. *Office 2019 - Průvodce uživatele*. Grada, 2019. ISBN 978-80-247-2303-7.
- **Extending:** Wewerka Peter. *Office 2019 all-in-one*. Hoboken, NJ: John Wiley & Sons, 2019. ISBN 978-1-119-51327-8.
- **Recommended:** Laurenčík Marek. *Excel 2016- Práce s databázemi a kontingenčními tabulkami*. Grada, 2017. ISBN 978-80-271-0477-2.
- **Recommended:** Benáčanová, Helena. *Tvorba aplikací v MS Excel : materiály ke cvičení*. Vyd. 1. Praha : Oeconomica, 2005. ISBN 80-245-0953-9.
- **Recommended:** Kateřina Mičudová, Mikuláš Gangur, Milan Svoboda, Pavla Říhová. *Základy statistiky a pravděpodobnosti*. Západočeská univerzita v Plzni, 2016. ISBN 978-80-261-0660-9.

## Time requirements

### All forms of study

| Activities | Time requirements for activity [h] |
|---|---|
| Presentation preparation (report) (1-10) | 10 |
| Contact hours | 30 |
| Individual project (40) | 40 |
| Total: | 80 |

## assessment methods

### Knowledge - knowledge achieved by taking this course are verified by the following means:

Continuous assessment

### Skills - skills achieved by taking this course are verified by the following means:

Seminar work

Project

### Competences - competence achieved by taking this course are verified by the following means:

Seminar work

## prerequisite

### Knowledge - students are expected to possess the following knowledge before the course commences to finish it successfully:

have a basic knowledge of MS Word

have a basic knowledge of MS Excel

have a basic knowledge of MS Powerpoint

### Skills - students are expected to possess the following skills before the course commences to finish it successfully:

is able to work with MS Word at the basic level

is able to work with MS Excel at the basic level

is able to work with MS Powerpoint at the basic level

**Competences - students are expected to possess the following competences before the course commences to finish it successfully:**

N/A

## teaching methods

### Knowledge - the following training methods are used to achieve the required knowledge:

Discussion

Lecture with visual aids

E-learning

Multimedia supported teaching

Students' portfolio

Interactive lecture

Self-study of literature

Individual study

Collaborative instruction

### Skills - the following training methods are used to achieve the required skills:

Skills demonstration

Interactive lecture

Practicum

Students' portfolio

E-learning

Lecture with visual aids

Multimedia supported teaching

Task-based study method

Individual study

Self-study of literature

One-to-One tutorial

### Competences - the following training methods are used to achieve the required competences:

Task-based study method

Individual study

E-learning

Self-study of literature

Multimedia supported teaching

## learning outcomes

### Knowledge - knowledge resulting from the course:

to know more advanced functionality of MS Word

to know more advanced functionality of MS Excel

describe an advanced technical problem in a spreadsheet environment

### Skills - skills resulting from the course:

complexly analyze technical problems using a spreadsheet

process large-scale text documents efficiently

use more advanced functions in MS Excel

### Competences - competences resulting from the course:

N/A

**Course is included in study programmes:**

| Study Programme | Type of | Form of | Branch | Stage | St. plan v. | Year | Block | Status | R.year | R. |
|---|---|---|---|---|---|---|---|---|---|---|
| Mechanical Engineering | Bachelor | Full-time | Industrial Engineering and Management | 1 | 2020 | 2023 | Compulsory courses | A | 3 | LS |
| Project and Process Management | Postgraduate Master | Full-time | Projektové a procesní řízení | 1 | 2020 | 2023 | Blok A: Povinné předměty | A | 1 | LS |
| Systems Engineering and Informatics | Postgraduate Master | Full-time | Project Management Systems | 1 | 2013 | 2023 | Blok A: Povinné předměty | A | 1 | LS |