Course title: Introduction to Python

Institute/Division: Institute of Materials Engineering, Faculty of Materials Engineering and

Physics

Number of contact hours: 60 (30h Lectures + 15h Computer Laboratory + 15h Project)

Course duration: 1 semester

ECTS credits: 3 Course description:

There are three main aims of the course:

- 1. Learning basic grammar and data structures of Python programming language.
- 2. Learning how to use basic scientific libraries.
- 3. Learning soft skills: team-work, communication in team.

Literature:

[1] M. Lutz – Learning Python, O'Reilly Media, 2013

[2] H. Fangohr — Computational Science and Engineering in Python, 2019, University of Southampton

[3] Various authors — Scipy Lecture Notes, 2019

[4] Various authors — SciPy Cookbook, 2019

Course type: 30h Lectures + 15h Computer Laboratory + 15h Project

Assessment method: Attendance, activity, homeworks and laboratory exercises, oral presentation **Prerequisites:** Knowledge of use of computer; Knowledge of computer programming in any language will be useful but not necessary – the level will be adjusted to audience needs.

Primary target group: Majors in Materials Engineering and Physics

Lecturer: Radosław Kycia, PhD (<u>rkycia@pk.edu.pl</u>)

Contact person: Radosław Kycia, PhD (<u>rkycia@pk.edu.pl</u>)