

Faculty of Economic Sciences, University of Warsaw
 Master's Programme Curriculum PART -TIME STUDIES
 Field of study: **Data Science and Business Analytics**
 Academic year 2020/2021

Only for those students, who did not complete course during the first degree

| | | | | |
|--------------------------------------|-------|---|------|-----|
| Occupational Safety and Health (OSH) | godz. | 4 | ECTS | 0,5 |
| Intellectual Property Protection | godz. | 6 | ECTS | 0,5 |

13-10-2021

| No | Course code | Course name | Course type | hours / ECTS | year | | | | Total Hours/ECTS Credits | Form of credit | |
|----------------------------------|------------------|--|-------------------|--------------|------|-----|-----|-----|--------------------------|----------------|--------|
| | | | | | I | | II | | | | |
| | | | | | 1 | 2 | 3 | 4 | | | |
| A General Courses | | | | | | | | | | | |
| 1 | university offer | General elective course (OGUN) | general classes | hours | | 30 | 30 | | | 60 | Credit |
| | | | | ECTS | | 3 | 3 | | | 6 | |
| | | <i>Total of hours in the group of courses</i> | | | 0 | 30 | 30 | 0 | | 60 | |
| | | <i>ECTS of credits in the group of courses</i> | | | 0 | 3 | 3 | 0 | | 6 | |
| B Core courses | | | | | | | | | | | |
| 2 | 2400-DS1AMI | Applied Microeconomics | lecture | hours | 45 | | | | | 45 | exam |
| | | | | ECTS | 5 | | | | | 5 | |
| 3 | 2400-DS1AMA | Applied Macroeconomics | lecture | hours | 45 | | | | | 45 | exam |
| | | | | ECTS | 5 | | | | | 5 | |
| 4 | 2400-DS1AE | Advanced Econometrics | lecture | hours | | 30 | | | | 60 | exam |
| | | | lab | | | 30 | | | | | |
| | | | | ECTS | | 6 | | | | 6 | |
| 5 | 2400-DS2AF | Applied Finance | lecture | hours | | | 30 | | | 45 | exam |
| | | | lab | hours | | | 15 | | | | |
| | | | | ECTS | | | 5 | | | 5 | |
| | | <i>Total of hours in the group of courses</i> | | | 90 | 60 | 45 | 0 | | 195 | |
| | | <i>ECTS of credits in the group of courses</i> | | | 10 | 6 | 5 | 0 | | 21 | |
| C Field -of study courses | | | | | | | | | | | |
| 6 | 2400-DS1R | R: intro / data cleaning and imputation R / basics of visualisation | lab | hours | 30 | | | | | 30 | exam |
| | | | | ECTS | 3 | | | | | 3 | |
| 7 | 2400-DS1SQL | Python and SQL: intro / SQL platforms | lab | hours | 30 | | | | | 30 | Credit |
| | | | | ECTS | 4 | | | | | 4 | |
| 8 | 2400-DS1AL | Algorithms for Data Science | lecture | hours | | 30 | | | | 45 | exam |
| | | | lab | hours | | 15 | | | | | |
| | | | | ECTS | | 6 | | | | 6 | |
| 9 | 2400-DS1ST | Statistics and Exploratory Data Analysis | lab | hours | 30 | | | | | 30 | Credit |
| | | | | ECTS | 5 | | | | | 5 | |
| 10 | 2400-DS1IDS | Introduction to Data Science | lecture | hours | 15 | | | | | 15 | exam |
| | | | | ECTS | 3 | | | | | 3 | |
| 11 | 2400-DS1UL | Unsupervised Learning | lab | hours | 30 | | | | | 30 | Credit |
| | | | | ECTS | 3 | | | | | 3 | |
| 12 | 2400-DS1WSMS | Webcraping and Social Media Scraping | lab | hours | | 15 | | | | 15 | Credit |
| | | | | ECTS | | 3 | | | | 3 | |
| 13 | 2400-DS1APR | Advanced Programming in R | lab | hours | | 30 | | | | 30 | exam |
| | | | | ECTS | | 5 | | | | 5 | |
| 14 | 2400-DS1ML1 | Machine Learning 1: classification methods | lab | hours | | 30 | | | | 30 | Credit |
| | | | | ECTS | | 4 | | | | 4 | |
| 15 | 2400-DS2AV | Advanced Visualisation in R | lab | hours | | | 30 | | | 30 | Credit |
| | | | | ECTS | | | 6 | | | 6 | |
| 16 | 2400-DS2TMS | Text Mining and Social Media Mining | lab | hours | | | 30 | | | 30 | exam |
| | | | | ECTS | | | 4 | | | 4 | |
| 17 | 2400-DS2BDA | Big Data Analytics | lab | hours | | | 15 | | | 15 | Credit |
| | | | | ECTS | | | 2 | | | 2 | |
| 18 | 2400-DS2ML2 | Machine Learning 2: predictive models, deep learning, neuron network | lab | hours | | | 30 | | | 30 | Credit |
| | | | | ECTS | | | 4 | | | 4 | |
| 19 | 2400-DS2RR | Reproducible Research | lab | hours | | | | 30 | | 30 | exam |
| | | | | ECTS | | | | 4 | | 4 | |
| 20 | 2400-DS2WWEF | Elective course (economics or finance) | discussion in lab | hours | | | | 30 | | 30 | Credit |
| | | | | ECTS | | | | 3 | | 3 | |
| 21 | 2400-DS2WWIT | Elective course (IT tools) | lab | hours | | | | 30 | | 30 | Credit |
| | | | | ECTS | | | | 3 | | 3 | |
| 22 | 2400-DS2WWQM | Elective course (quantitative methods) | discussion in lab | hours | | | | 60 | | 60 | Credit |
| | | | | ECTS | | | | 6 | | 6 | |
| | | <i>Total of hours in the group of courses</i> | | hours | 135 | 120 | 105 | 150 | | 510 | |
| | | <i>ECTS of credits in the group of courses</i> | | ECTS | 18 | 18 | 16 | 16 | | 68 | |

| D | | Soft skills courses | | | | | | | | | |
|----|----------------|---|------------|--|-------|------------|------------|------------|------------|------------|--------|
| 23 | 2400-DS1CA | Communication and Autopresentation | discussion | hours | 30 | | | | | 30 | credit |
| | | | | ECTS | 2 | | | | | 2 | |
| 24 | 2400-DS2NEG | Negotiations | discussion | hours | | | 30 | | | 30 | exam |
| | | | | ECTS | | | 3 | | | 3 | |
| 25 | 2400-DS2UB | Understanding Business | lecture | hours | | | | 30 | | 30 | Credit |
| | | | | ECTS | | | | 3 | | 3 | |
| | | | | <i>Total of hours in the group of courses</i> | hours | 30 | 0 | 30 | 30 | 90 | |
| | | | | <i>ECTS of credits in the group of courses</i> | ECTS | 2 | 0 | 3 | 3 | 8 | |
| D | | Master Thesis Seminar | | | | | | | | | |
| 26 | 2400-SU2TS.... | Master Thesis Seminar | seminar | hours | | 30 | 30 | 30 | | 90 | Credit |
| | | | | ECTS | | 3 | 3 | 3 | | 9 | |
| 27 | | Preparation of the thesis for the diploma examination | own work | hours | | 0 | 0 | 0 | | 0 | |
| | | | | ECTS | | | | 8 | | 8 | |
| | | | | <i>Total of hours in the group of courses</i> | hours | 0 | 30 | 30 | 30 | 90 | |
| | | | | <i>ECTS of credits in the group of courses</i> | ECTS | 0 | 3 | 3 | 11 | 17 | |
| | | | | Total of hours | hours | 255 | 240 | 240 | 210 | 945 | |
| | | | | TOTAL of ECTS | ECTS | 30 | 30 | 30 | 30 | 120 | |