

KIERUNEK:  
Specjalność studiów:  
Poziom studiów:  
Profil studiów:  
Forma studiów:

**Business Analytics**  
**brak specjalności**  
Studia I stopnia  
Praktyczny  
Stacjonarne

| Lp.  | Nazwa modułu (przedmiotu)              | Rodzaj | Punkty ECTS | Wymiar godzin (łącznie) |            |            |            |           | Rok I            |             |            |           |                  | Rok II      |           |           |                  |                  | Rok III |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--------|-------------|-------------------------|------------|------------|------------|-----------|------------------|-------------|------------|-----------|------------------|-------------|-----------|-----------|------------------|------------------|---------|----|------------------|-------------|------------|------------|------------------|-------------|------------|-----------|-----------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |        |             | Rodzaj zaj.             |            |            |            |           | 1                |             | 2          |           |                  | 3           |           | 4         |                  |                  | 5       |    | 6                |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |        |             | WY                      | CA         | LB         | KW         | SM        | WY               | CA          | LB         | KW        | SM               | WY          | CA        | LB        | KW               | SM               | WY      | CA | LB               | KW          | SM         | WY         | CA               | LB          | KW         | SM        |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |        |             |                         |            |            |            |           | Forma zaliczenia | Punkty ECTS |            |           | Forma zaliczenia | Punkty ECTS |           |           | Forma zaliczenia | Punkty ECTS      |         |    | Forma zaliczenia | Punkty ECTS |            |            | Forma zaliczenia | Punkty ECTS |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Blok modułów (przedmiotów) obowiązkowych - A</b>                |  |        |             |                         |            |            |            |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1  | Introduction to economics              |        | 8           | 60                      | 30         | 30         |            |           |                  |             | 30         | 30        |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2  | Introduction to management             |        | 6           | 45                      | 30         | 15         |            |           |                  | 30          | 15         |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3  | Introduction to commerce law           |        | 4           | 30                      | 30         |            |            |           |                  | 30          |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4  | IT for analytics                       | P      | 4           | 30                      |            |            | 30         |           |                  |             |            | 30        |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5  | Calculus                               |        | 6           | 90                      | 30         | 60         |            |           |                  | 15          | 30         |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6  | Business statistics                    | P      | 8           | 90                      | 30         |            | 60         |           |                  | 15          |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7  | Accounting                             | P      | 2           | 45                      | 15         |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8  | Data collection methods                | P      | 2           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9  | Python programming                     | P      | 2           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10   | Programming for analytics              | P      | 7           | 60                      |            |            | 60         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11   | Introduction to finance                | P      | 4           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12   | Marketing                              |        | 5           | 45                      | 15         | 30         |            |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13   | Soft skills and communication training | P      | 2           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14   | Introduction to databases              | P      | 3           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15   | Advanced spreadsheets                  | P      | 10          | 90                      |            |            | 90         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16   | Econometrics                           | P      | 9           | 60                      |            |            | 60         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17   | Financial analysis                     | P      | 6           | 45                      | 15         | 30         |            |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18   | Data visualization and presentation    | P      | 5           | 45                      | 15         | 0          | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19   | Project management                     | P      | 4           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20   | Geographical information systems       | P      | 5           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21   | Data mining                            | P      | 6           | 45                      | 15         |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22   | Business simulation                    | P      | 4           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23   | Analytical project                     | P      | 6           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Razem A</b>   |  |        | <b>118</b>  | <b>1050</b>             | <b>225</b> | <b>195</b> | <b>630</b> |           |                  | <b>120</b>  | <b>75</b>  | <b>60</b> |                  |             | <b>29</b> | <b>45</b> | <b>30</b>        | <b>150</b>       |         |    | <b>17</b>        | <b>15</b>   | <b>60</b>  | <b>150</b> |                  |             | <b>25</b>  | <b>30</b> | <b>30</b> | <b>120</b> | <b>22</b>  | <b>15</b> | <b>120</b> | <b>19</b>  | <b>30</b> | <b>6</b>  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Blok modułów (przedmiotów) wybieralnych/fakultatywnych - B</b>  |  |        |             |                         |            |            |            |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24   | Module of general university subjects  |        | 1           | 15                      | 15         |            |            | 15        |                  |             |            |           |                  |             | ZO        | 1         |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25   | Physical education                     |        | 0           | 60                      |            | 60         |            |           | 30               |             |            |           |                  |             | ZO        | 0         |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26   | Foreign language                       |        | 8           | 120                     |            | 120        |            |           |                  |             |            |           |                  |             | ZO        | 2         |                  | 30               |         |    |                  |             |            | 30         |                  | ZO          | 2          |           |           | 30         |            | E         | 2          |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27   | Humanities Module                      |        | 5           | 45                      | 45         |            |            |           |                  |             |            |           |                  |             |           | 15        |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28   | E-business / Web analytics             | P      | 4           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29   | Seminar                                | P      | 10          | 60                      |            |            | 60         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30   | Database programming / Bin Data        | P      | 5           | 30                      |            |            | 30         |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Razem B</b>   |  |        | <b>33</b>   | <b>360</b>              | <b>60</b>  | <b>60</b>  | <b>180</b> | <b>60</b> | <b>15</b>        | <b>30</b>   |            |           |                  |             | <b>1</b>  | <b>15</b> | <b>30</b>        | <b>30</b>        |         |    | <b>4</b>         | <b>30</b>   | <b>30</b>  | <b>30</b>  | <b>5</b>         |             | <b>60</b>  | <b>20</b> | <b>8</b>  | <b>60</b>  | <b>20</b>  | <b>11</b> | <b>60</b>  | <b>20</b>  | <b>4</b>  |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Razem A+B</b>   |  |        | <b>151</b>  | <b>1410</b>             | <b>285</b> | <b>255</b> | <b>810</b> | <b>60</b> | <b>135</b>       | <b>105</b>  | <b>60</b>  |           |                  |             | <b>30</b> | <b>60</b> | <b>60</b>        | <b>180</b>       |         |    | <b>21</b>        | <b>45</b>   | <b>60</b>  | <b>180</b> | <b>30</b>        | <b>30</b>   | <b>180</b> | <b>20</b> | <b>30</b> | <b>15</b>  | <b>180</b> | <b>20</b> | <b>30</b>  | <b>30</b>  | <b>20</b> | <b>10</b> |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Razem godziny w semestrze</b>                                   |  |        |             |                         |            |            |            |           |                  |             | <b>300</b> |           |                  |             |           |           | <b>300</b>       |                  |         |    |                  |             | <b>285</b> |            |                  |             |            |           |           | <b>260</b> |            |           |            | <b>215</b> |           | <b>50</b> |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Razem godziny w roku</b>  |  |        |             |                         |            |            |            |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Praktyki (pkt ECTS/wymiar) (P)                                     |  | P      | 27          | 6 miesięcy=720h         |            |            |            |           |                  |             |            |           |                  |             |           |           | 9                | 2 miesiące=240 h |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liczba punktów za pracę dyplomową i jej obronę (egzamin dyplomowy) |  |        | 2           |                         |            |            |            |           |                  |             |            |           |                  |             |           |           |                  |                  |         |    |                  |             |            |            |                  |             |            |           |           |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Punkty ECTS w semestrze</b>                                     |  |        |             |                         |            |            |            |           |                  |             | <b>30</b>  |           |                  |             |           |           | <b>30</b>        |                  |         |    |                  |             | <b>30</b>  |            |                  |             |            |           |           | <b>30</b>  |            |           |            |            | <b>30</b> |           | <b>30</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Razem</b>   |  |        | <b>180</b>  | <b>2130</b>             | <b>285</b> | <b>255</b> | <b>810</b> | <b>60</b> |                  |             | <b>60</b>  |           |                  |             |           | <b>60</b> |                  |                  |         |    |                  | <b>60</b>   |            |            |                  |             |            |           | <b>60</b> |            |            |           |            |            |           |           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Zatwierdzono na posiedzeniu Senatu w dniu:

25 maja 2022 r.

Symbole: WY-wykład, CA-ćwiczenia, LB-laboratorium, KW-konwersatorium, SM-seminarium

E - egzamin

ZO - zaliczenie z oceną

A - blok modułów (przedmiotów) obowiązujących wszystkich studentów danego kierunku i specjalności

B - blok modułów (przedmiotów) wybieralnych/fakultatywnych m.in. specjalnościowych lub specjalizacyjnych (minimum 30% ogólnej liczby punktów ECTS)

P - przedmiot praktyczny