

| <b>STUDY MODULE DESCRIPTION FORM</b>  |  |   |
|---|--|---|
| Name of the module/subject<br><b>Pre-diploma Practice</b>   |  | Code<br><b>1010101161010110303</b>  |
| Field of study<br><b>Civil Engineering First-cycle Studies</b>  | Profile of study (general academic, practical)<br><b>practical</b> | Year /Semester<br><b>3 / 6</b>  |
| Elective path/specialty<br><b>-</b>   | Subject offered in:<br><b>Polish</b>                               | Course (compulsory, elective)<br><b>obligatory</b>  |
| Cycle of study:<br><b>First-cycle studies</b>   | Form of study (full-time, part-time)<br><b>full-time</b>           |   |
| No. of hours<br>Lecture: - Classes: <b>160</b> Laboratory: - Project/seminars: -  |  | No. of credits<br><b>3</b>  |
| Status of the course in the study program (Basic, major, other)<br><b>major</b>   |  | (university-wide, from another field)<br><b>from field</b>  |
| Education areas and fields of science and art<br><b>technical sciences</b>  |  | ECTS distribution (number and %)<br><b>3 100%</b>   |
| <b>Responsible for subject / lecturer:</b><br><br>dr inż. Tomasz Wiatr<br>email: tomasz.wiatr@put.poznan.pl<br>tel. +48 61 665-2464<br>Wydział Budownictwa i Inżynierii Środowiska<br>ul. Piotrowo 5, 60-965 Poznań   |  |   |
| <b>Prerequisites in terms of knowledge, skills and social competencies:</b>   |  |   |
| 1   | <b>Knowledge</b>   | Knowledge from area of general construction on the level of 3rd year of study matched to character of selected practice and future speciality of civil engineer profession relevant to type of construction facilities.             |
| 2   | <b>Skills</b>  | Ability to link of knowledge acquired on University with practice of this knowledge application, incl. critical outlook for quality of design documentation and production processes on construction site in context of developing. |
| 3   | <b>Social competencies</b>   | Awareness of civil engineer role in designing of facilities and managing of construction works with the principles of rules of professional ethics and and respect for other participants of work process and environment.          |
| <b>Assumptions and objectives of the course:</b><br>Basic purpose is recognition of civil engineer work specifics on the area of independent technical functions, i.e. construction designer as well construction manager. Additional purpose is working out of critical outlook on field of own knowledge and application practice developing. |  |   |
| <b>Study outcomes and reference to the educational results for a field of study</b>   |  |   |
| <b>Knowledge:</b>   |  |   |
| 1. Knowledge of technical conditions, which should be reply construction facilities (types of facilities adequate to future speciality of profession). - [K_W06]  |  |   |
| 2. Awareness of key safety requirements in construction and aesthetics of construction work product (quality of construction facility). - [K_W15]   |  |   |
| 3. Knowledge of environmental impacts of facility on surround and environments on construction facility, in execution phase too. - [K_W17]  |  |   |
| <b>Skills:</b>  |  |   |
| 1. Work with design documentation (planning) and construction process (documenting) within a given specialty/specialization (interests). - [K_U14]  |  |   |
| 2. Planning in complying with safety rules, including designing and execution of construction works (elimination of potential threats). - [K_U16]   |  |   |
| 3. Organising work in accordance with the principles of technology, the type of work and the applicable law, including construction. - [K_U21]  |  |   |
| <b>Social competencies:</b>   |  |   |
| 1. Awareness of civil engineer responsibility in designing and execution. - [K_K05]   |  |   |
| 2. Ability to formulate an opinion on the processes in the construction industry in the context of his own knowledge. - [K_K07]   |  |   |
| 3. Adherence to professional ethics of civil engineer and worthy representation of profession. - [K_K11]  |  |   |

| <b>Assessment methods of study outcomes</b>  |                      |      |
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| <p>The basis of assessment is delivered diary of practice signed by authorized representative of the organization to practice of allowing (possibly also authorized to perform technical functions within meaning of the law). The practice is recognized without note. Entry to index performs representative of the university.</p>  |                      |      |
| <b>Course description</b>  |                      |      |
| <p>Practice takes place in execution enterprises (on site) or in design offices or research institutions, such as universities, however, because of importance that has the design knowledge of execution preferred is practice on site. In the case of practices in the design office, it is necessary to combine it with the construction site (recommended practices on site participation is 50% of its duration, and so two weeks).</p> <p>Preferred plan of practice should include the following 4 phases: 1) study of the design documentation (property and construction) is assisting with the engineer (eg, construction manager), so the direct supervisor. In this phase, is carried out detailed planning practices and health and safety training,</p> <p>2) observation of construction site managers work (engineers, technicians, foremans) in the current mode (communication, commissionings, settlement, as-built documentation), 3) participation in directing the crew as a site engineer (analysis of drawings and specifications, preparation of orders, quantitative and qualitative commissioning), with the support of direct supervisor, 4) the development of the final diary of practices and conclusions about the relationship of design documentation and performance requirements (for own needs).</p> <p>The practice is carried out taking into account the specialization of the civil engineering profession (general construction, bridge, road and railway) by the fact of taking into account the type of construction (buildings and structures above ground, bridges and underground structures, roads, streets, airports, railroads).</p> |                      |      |
| <b>Basic bibliography:</b>   |                      |      |
| <ol style="list-style-type: none"> <li>Gawrysiak U., Budownictwo. Bezpiecznie od startu. Państwowa Inspekcja Pracy, Warszawa 2009.</li> <li>Rozporządzenia wykonawcze prawa budowlanego o warunkach technicznych, jakim powinny odpowiadać obiekty budowlane i ich usytuowanie (rodzaje obiektów zależnie od przyszłej specjalności zawodu).</li> <li>Rozporządzenie Ministra Infrastruktury z dnia 6 lutego 2003 r. w sprawie bezpieczeństwa i higieny pracy podczas wykonywania robót budowlanych. Dz. U. 2003 nr 47 poz. 401</li> <li>Gawrysiak U., Budownictwo. Bezpiecznie od startu. Państwowa Inspekcja Pracy, Warszawa 2009.</li> <li>Rozporządzenia wykonawcze prawa budowlanego o warunkach technicznych, jakim powinny odpowiadać obiekty budowlane i ich usytuowanie (rodzaje obiektów zależnie od przyszłej specjalności zawodu).</li> <li>Rozporządzenie Ministra Infrastruktury z dnia 6 lutego 2003 r. w sprawie bezpieczeństwa i higieny pracy podczas wykonywania robót budowlanych. Dz. U. 2003 nr 47 poz. 401</li> </ol>   |                      |      |
| <b>Additional bibliography:</b>  |                      |      |
| <ol style="list-style-type: none"> <li>Gilewicz A., Gilewicz M., Poradnik BHP w projektowaniu, wykonawstwie i nadzorze robót budowlano-montażowych. Alfa-Wero, Warszawa 1997.</li> <li>Wieczorek Z., Budownictwo. Wymagania bezpieczeństwa pracy. Państwowa Inspekcja Pracy, Warszawa 2011.</li> <li>Gilewicz A., Gilewicz M., Obowiązki uczestników procesów pracy w zakresie BHP. Alfa-Wero, Warszawa 1998.</li> <li>Gilewicz A., Gilewicz M., Poradnik BHP w projektowaniu, wykonawstwie i nadzorze robót budowlano-montażowych. Alfa-Wero, Warszawa 1997.</li> <li>Wieczorek Z., Budownictwo. Wymagania bezpieczeństwa pracy. Państwowa Inspekcja Pracy, Warszawa 2011.</li> <li>Gilewicz A., Gilewicz M., Obowiązki uczestników procesów pracy w zakresie BHP. Alfa-Wero, Warszawa 1998.</li> </ol>   |                      |      |
| <b>Result of average student's workload</b>  |                      |      |
| Activity   | Time (working hours) |      |
| 1. Reconciliation of detailed scope of practice in accordance with the general program   | 4                    |      |
| 2. Health and safety training with regard to the scope and nature of practice (work place)   | 4                    |      |
| 3. Knowing organization of construction site or design office (depending on the type of practice)  | 8                    |      |
| 4. Knowing design documentation of constructed or designed facility  | 24                   |      |
| 5. Assisting other employees of the company (designers, executives, brigade)   | 40                   |      |
| 6. Work with design documentation and documentation of production and storage  | 40                   |      |
| 7. Organizational and financial management issues of construction site/design office   | 32                   |      |
| 8. Practice documentation in diary of practice with obtaining of confirmation (signature)  | 4                    |      |
| 9. Completion of practice, sentence utensils, and cleaning of their work   | 4                    |      |
| <b>Student's workload</b>  |                      |      |
| Source of workload   | hours                | ECTS |
| Total workload   | 160                  | 3    |

|                      |     |   |
|----------------------|-----|---|
| Contact hours        | 1   | 1 |
| Practical activities | 160 | 2 |