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| <b>Country</b><br>PL | <b>Institution</b><br>Polish Air Force Academy | <b>Common Module</b><br>English for Aircraft Maintenance – SET Part 2 | <b>ECTS</b><br>3.0 |
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| <b>Service:</b><br>Air Force<br>Army/<br>Navy<br>Aviation | <p align="center"><b>Minimum Qualification for Lecturers</b></p> <ul style="list-style-type: none"> <li>• <b>English Instructors:</b> <ul style="list-style-type: none"> <li>○ Master's degree in teaching English as a foreign language.</li> <li>○ Minimum five-year experience in teaching English for specific purposes.</li> </ul> </li> <li>• <b>Subject Matter Experts:</b> <ul style="list-style-type: none"> <li>○ Operational familiarity.</li> <li>○ English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3.</li> </ul> </li> </ul> |
| <b>Language:</b><br>English                               |  |

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| <b>Prerequisites for international participants:</b><br><br>English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2 | <b>Goal of the Module</b>   |
|  | <b>Enhance language skills and strategies for effective communication in an aviation environment with focus on non-routine and unexpected situations:</b> <ul style="list-style-type: none"> <li>• Familiarize with a wide range of technical vocabulary related to aviation.</li> <li>• Provide exposure to a representative sample of authentic materials, topics and context.</li> <li>• Develop language skills and study/reading strategies necessary when working with authentic texts e.g. maintenance manuals.</li> <li>• Develop relevant language functions (e.g. resolving misunderstandings, stating intentions, expressing consequences).</li> <li>• Develop listening skills through exposure to a variety of aviation maintenance related listening material.</li> </ul> |

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| <b>Learning outcomes</b> | <b>Know-ledge</b>    | <ul style="list-style-type: none"> <li>• Knows the relevant working vocabulary related to aircraft, its maintenance, servicing and systems as well as language structures.</li> <li>• Knows the reading strategies to be adopted when working with authentic texts.</li> </ul>   |
|                          | <b>Skills</b>        | <ul style="list-style-type: none"> <li>• Is able to apply the acquired vocabulary and language structures necessary to work with technical manuals and on the equipment in order to ensure effective action in the technical personnel tasks e.g. to appropriately identify and remedy a fault.</li> <li>• Is able to maintain, safely operate and manage the equipment used by his/her unit.</li> </ul>                                   |
|                          | <b>Compe- tences</b> | <ul style="list-style-type: none"> <li>• Is capable of communicating, interacting and discussing using the relevant aircraft maintenance-related vocabulary and language structures.</li> <li>• Applies the module relevant vocabulary and language structures for certain tasks (e.g.: briefings) given by instructors.</li> <li>• Enforces all safety regulations applicable in the aviation technical personnel environment.</li> </ul> |

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| <b>Verification of learning outcomes</b>   |
| <p><b>Observation:</b> Along the course students are given:</p> <ul style="list-style-type: none"> <li>• Topics to discuss within syndicates and in the plenary.</li> <li>• Roleplays to do in pairs.</li> </ul> <p><b>Evaluation:</b> Group presentation of given topics.</p> <p><b>Test:</b> Within each main topic students are given two tests on:</p> <ul style="list-style-type: none"> <li>• Vocabulary.</li> <li>• Reading/Listening comprehension.</li> </ul> |

| <b>Module Details</b>  |                       |  |
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| <b>Main Topic</b>  | <b>Recommended WH</b> | <b>Details</b>   |
| Mechanical Principles  | 2                     | <ul style="list-style-type: none"> <li>Terminology related to simple and complex machines.</li> <li>Mechanical advantage.</li> </ul>   |
| Explaining Engine Principles                                   | 2                     | <ul style="list-style-type: none"> <li>Identifying definitions and descriptions.</li> </ul>  |
| Pneudraulic Principles   | 4                     | <ul style="list-style-type: none"> <li>Gases and liquids as working media.</li> <li>Basic principles of pneudraulics.</li> </ul>   |
| Basic pneudraulic Systems                                      | 2                     | <ul style="list-style-type: none"> <li>Basic pneudraulic systems – organizing process descriptions.</li> </ul>   |
| Pneudraulic Components   | 2                     | <ul style="list-style-type: none"> <li>Description of pneudraulic components.</li> </ul>   |
| Gears and gear Trains  | 6                     | <ul style="list-style-type: none"> <li>Terminology related to gears and power transmission.</li> <li>Gear train functions.</li> </ul>  |
| Bearings   | 2                     | <ul style="list-style-type: none"> <li>Review of friction types and their effect.</li> </ul>   |
| Bearing Types  | 4                     | <ul style="list-style-type: none"> <li>Frictional bearings and antifrictional bearings</li> <li>Radial bearings and thrust bearings.</li> </ul>  |
| Springs and shock Absorption                                   | 4                     | <ul style="list-style-type: none"> <li>Introduction to springs and their functions.</li> <li>Compression vs. extension springs..</li> </ul>  |
| Shock Struts   | 2                     | <ul style="list-style-type: none"> <li>Aircraft shock struts, cable tension regulators.</li> <li>Arrester hooks.</li> </ul>  |
| Munitions  | 6                     | <ul style="list-style-type: none"> <li>Basic vocabulary.</li> </ul>  |
| Avionics   | 6                     | <ul style="list-style-type: none"> <li>Basic vocabulary.</li> </ul>  |
| <b>Total</b>   | <b>42</b>             |  |
| <b>Additional hours (WH) to increase the learning outcomes</b> |                       |  |
| <b>Self-Studies</b>  | 33                    | <ul style="list-style-type: none"> <li>Self-studies &amp; pre-readings, e-learning, syndicate work.</li> </ul>   |
| <b>Total WH</b>  | <b>75</b>             | <ul style="list-style-type: none"> <li>The amount of hours for the use of e-learning is up to the module director.</li> <li>The module director adapts the working hours (WH) to the national law and/or institution's rules &amp; regulations.</li> </ul> |

**List of Abbreviations:**

- AF ..... Air Force
- B1, B2 ..... Common Reference Levels
- CAA ..... Civil Aviation Authority
- CEFR ..... Common European Reference for Languages
- ECL ..... English Competence Level
- Lt Col ..... Lieutenant Colonel
- MEng ..... Master of Engineering
- NATO ..... North Atlantic Treaty Organization
- PAFA ..... Polish Air Force Academy
- PhD ..... Doctor / Doctor of Philosophy
- Pil. .... Pilot
- PL ..... Poland
- SET ..... Specialized English Terminology
- STANAG ..... Standardized Agreement
- WH ..... Working Hours