КАРТА МОДУЛЯ

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| МОВЛЕННЄВІ НАВИЧКИ | ЗНАТИ/ВМІТИ | Book 1Professional English in Use. Engineering. Technical English for Professionals. Author: Mark Ibbotson. Cambridge University Press, p. 148 | Book 2Evan Frendo, English for Construction, 1 Vocational English course book. – Pearson, 2012. | Open Sources  |
| Reading | Ability to comprehend and extract information from complex technical documents, manuals, specifications, and research papers related to automation and robotics. Understanding schematics, blueprints, and diagrams commonly used in the field, including electrical and mechanical drawings.Understanding the organization of the construction sector.Learning how to interpret and describe 2D and 3D technical drawings, including dimensions and orthographic projections. Exploring different materials used in construction, their properties, and how to compare their strength, toughness, and durability. Identifying construction equipment, discussing its uses, and learning how to describe faults and organize repairs. |  **Drawings: types and scales.** 1. Drawing types and scales – p.8
2. Types of views used on drawings - p.8

**Design development.**A. Initial design phase – p. 10B. Collaborative development – p. 10**Design solutions.**A. Design objectives – p. 12B**.** Design calculations – p. 12 | **Finding out more** p. 6 - Talking about jobs in the construction industry.**The construction industry** p. 8 - Describing parts of the construction industry**Trades and training** p. 12 - Describing trades and the stages of trade training**Trade materials** p. 14 - Talking about materials. **Making calculations.**Instructions p. 16 - Giving instructions. Saying where things are.**The apprentice** p. 18 - Giving personal information.**Building materials** p. 28 - Talking about building suppliers and materials. Materials p. 30 - Placing and confirming an order. Checking stock items.Problems on site p. 34 - Explaining problems.Warning signs p. 44 - Identifying different types of signs.Site safety p. 46 - Describing problems. Completing a vehicle safety checklist.First aid p. 48 - Explaining injuries. Waste disposal p. 50 - Understanding waste disposal and colour codes. | Types of Scales in Engineering Drawing: <http://4mechtech.blogspot.com/2015/07/types-of-scale-in-engineering-drawing.html>Design Development- What is it? Is it worth it?<https://www.linkedin.com/pulse/design-development-what-worth-jennifer-crawford> |
| Vocabulary | Ability to use specialized vocabulary with precision, ensuring that technical terms are employed correctly and in context.Familiarity with industry-specific jargon used in construction to effectively communicate with professionals and understand technical documents.Understanding and applying vocabulary units related to health and safety guidelines on construction sites, personal protective equipment (PPE), common warning signs, and regulations. including managing incidents and traffic control. | **Horizontal and vertical measurements.**A. Linear dimensions – p.14B. Level and plumb – p.14**Locating and setting out.**A. Centrelines and offsets – p.16B. Grids – p.16**Dimensions, numbers and calculations.**A. Key dimensions of circles – p.18B. Pipe dimensions – p.18A. Precision and tolerance – p.20B. Fit – p.20A. Decimals and fractions – p.22B. Addition, subtraction, multiplication and division – p.22**Measurable parameters.**A. Supply, demand and capacity– p.26B. Input, output and efficiency – p.26 | The construction industry: Jobs, Types of construction, Industry sectors, House Features pp. 4-11Trades: Trades, Vocational courses, Materials, Calculation words, Scaffolding, Tools -pp. 12-19Heavy equipment: Movements verbs, Cranes, Remote control, Equipment for mixing concrete -pp.20-27Building supplies: Products and materials, Supply orders, Types of insulationStock, Parts of a building site – pp. 28-35Health and safety: Personal protective equipment (PPE), Health and safety, Vehicle parts, A first aid kit, Waste materials- pp.44-51 | **Construction Vocabulary:**<https://www.youtube.com/watch?v=4Ka6ZXJLaJg><https://www.youtube.com/watch?app=desktop&v=ylF5MVEbQPc><https://www.youtube.com/watch?v=6HLQpLOPvc0>**The Definitive Construction Safety Glossary:**<https://www.myhqsuite.com/blog/the-definitive-construction-safety-glossary/>**Health and safety keywords****Glossary of terms:**https://iosh.com/guidance-and-resources/professionals/health-and-safety-keywords |
| Speaking | Ability to effectively present ideas, project proposals, and technical information in a clear and organized manner.Skill in participating in technical discussions, team meetings, and conveying ideas within a group of professionals working in construction. Managing construction tasks, discussing timelines, and handling contracts. Learning how to communicate effectively in project meetings.Covering how to make financial estimates for materials and projects.  | **Drawings: types and scales** – Over to you: p.9Design development – Over to you: p.11Design solutions – Over to you: p.13**Horizontal and vertical measurements.**Over to you: p.15**Locating and setting out.** Over to you: p.17**Dimensions, numbers and calculations.** Over to you: p.19Over to you: p.21Over to you: p.23**Measurable parameters** Over to you: p.27 | **Speaking** Work in pairs and introduce yourselves. Use the model to help you. – p. 5**Speaking** Choose a role card. Introduce yourself to other students. Use the models suggested to help you. – p.8**Speaking** Work in groups. Think about the construction industry in your area. – p.9**Speaking** Work in pairs. Draw a simple house plan and label it. Show it to your partner and ask and answer questions about it. - p.10**Speaking** Work in pairs. Student A look at the information on this page. Student B look at the information on page 68. – p.13**Speaking** Work in pairs. Student A look at illustration A on this page. Student B look at illustration B on page 68. Write down what each control is for. Then take turnsto explain your illustration. – p.24**Speaking** Describe the peculiarities and work of the chute, concrete pump, concrete transport truck, hand mixer, hooper, portable mixer. -p. 25**Speaking** Work in small groups. Think about suppliers you know or use. What products do they sell? Discuss. -p. 29**Speaking** Work in pairs. Practise a telephone conversation between a supplier and a buyer. -p.30**Speaking** Create a conversation between a client and a building contractor. Reproduce it in the classroom. **Speaking** Work in pairs. Make a list of problems on site. Use *too* and *not enough.* Then discuss solutions. -p.34**Speaking** Work in pairs. What safety signs do you know/see on site? Discuss with your partner. -p.45**Speaking** Work in pairs and take turns. Tell your partner about the injury and explain how it happened. Your partner explains what to do using the phrases in the box. |  |
| Grammar | Correct use of proper nouns, especially when referring to specific components, technologies, or brands within the engineering field in general and construction in particular.Consistent and accurate use of verb tenses to convey the timing and sequence of events, especially in describing processes and procedures.Ensuring that the subject and verb agree in number, especially when discussing multiple components or processes.Effective use of adjectives and adverbs to provide additional details and precision in technical descriptions.Demonstrating an ability to vary sentence structure for a more engaging and effective presentation of information.Proficiency in constructing conditional sentences to describe hypothetical situations or requirements in construction. | **English Grammar in Use. Raymond Murphy. – Cambridge University Press, 2019. – P. 307.**1. The Present Simple Tense. (Unit 2, p.4 - Ex. 2.1 – 2.5).2. The Past Simple Tense. (Unit 5, p.10 - Ex. 5.1 – 5.5).3. The Future Simple Tense. (Unit 21, p.42, 21.1 – 21.4; Unit 22, p.44, Ex. 22.1 –2.5).4. Individual work: Questions, Auxiliary verbs (Units 48 – 51); Articles (Units 71 – 77); Plural form (Unit 78); Possessive case (Unit 71).5. The Present Continuous Tense. (Unit 1, p.2 - Ex. 1.1 – 1.5).6. The Past Continuous Tense. (Unit 6, p.12 - Ex. 6.1 – 6.4). | **English Grammar in Use. Raymond Murphy. – Cambridge University Press, 2019. – P. 307.**6. The Past Continuous Tense. (Unit 6, p.12 - Ex. 6.1 – 6.4).7 The Present Perfect Tense. (Unit 13, p.26 - Ex. 13.1 – 13.4).8. The Past Perfect Tense. (Unit 15, p.30 - Ex. 15.1 – 15.5).9. The Future Perfect Tense. The Future Continuous Tense. (Unit 24, p.48 - Ex. 24.1 – 24.2). 10. Individual work: Numerals. Real condition (Unit 25, p.50 - Ex. 25.1 – 25.4). Irregular verbs (Appendix 1, p. 274).11. Individual work: Pronouns (Units 81 – 82, p. 162 – 164); Adjectives, Adverbs (Units 97 – 100, p. 194 – 200); Degrees of comparison (Units 104 – 107, p. 208 – 214); | The Future-in-the-Past (<https://grammarway.com/ua/future-in-the-past>), Ex.: <https://test-english.com/grammar-points/b2/future-in-the-past/>**5 Basic English Grammar Rules - Improve Your English Grammar**<https://www.youtube.com/watch?app=desktop&v=fHhYodLyUsA>**Your Go-To Guide for English Grammar**<https://www.grammarly.com/grammar> |
| Writing | Adherence to consistent technical writing style, including formatting conventions for documents, reports, and code documentation.Avoiding unnecessary repetition and redundancy in technical writing to enhance clarity. | **Drawings: types and scales** Ex. 1.1, 1.2, 1.3, 1.4 – p.9**Design development.**Ex. 2.1, 2.2, 2.3, 2.4 – p.11**Design solutions.**Ex. 3.1, 3.2, 3.3, – p.13**Horizontal and vertical measurements.**Ex. 4.1, 4.2, 4.3, 4.4 – p.15**Locating and setting out.**Ex. 5.1, 5.2, 5.3 – p.17**Dimensions, numbers and calculations**Ex. 6.1, 6.2, 6.3 – p.19Ex. 7.1, 7.2, 7.3 – p.21Ex. 8.1, 8.2, 8.3, 8.4 – p.23**Measurable parameters**Ex. 10.1, 10.2, 10.3 – p.27 | The construction Industry – p. 43,4,5 The construction Industry – p. 4-7 | Design solutions.1. Write an essay analysing the different stages of the design development process. Discuss the importance of each stage, common challenges, and the role of creativity in design.2. Choose a well-known design project or product. Write a case study that explores the development process, challenges faced, and the impact of the design on the intended audience or users.3. Conduct an interview with a professional designer. Write an article or report summarizing the interviewee's insights into their design development process, sources of inspiration, and advice for aspiring designers. |
| Listening | Ability to understand complex lectures, presentations, and discussions on topics related to construction.Following Instructions: Capability to accurately follow spoken instructions related to technical tasks and procedures. |  | Listening 2 – p.4Listening 5 – p.7Listening 6, 7 – p.8Listening 1 – p.10Listening 8 – p.15Listening 1,2 – p.18Listening 5 – p.23Listening 1,2 – p.24Listening 1,2, 3 – p.30Listening 1,2, 3 – p.32Listening 1 – p.34Listening 6, 7 – p.47Listening 1 – p.54 | 1) Types of Scales in Engineering Drawing<https://www.youtube.com/watch?v=_VktSY6SIH0>2) What is Design Development?<https://www.youtube.com/watch?v=st_jqk-zdSw> |