Kyiv National University of Trade and Economics

Faculty of Trade and Marketing

Information Package

European Credit Transfer and Accumulation System (ECTS)

Field of knowledge 07 " Management and Administration"

Specialty 076 "Entrepreneurship, trade and exchange

activity"

Specialization "Product safety and quality management"

Education level "Bachelor"

3. Educational Porgram

Program team manager (program guarantor) Holub Bohdan Oleksiyovich, assistant professor of the Department of Commodity science, safety and quality management, candidate of Sciences, (Engineering) assistant professor.

| 1 - | General information |
|---|--|
| Full name of IHE and structural unit | Kyiv National University of Trade and Economics |
| Level of higher education and qualification name in the original language | Level of higher education: Bachelor Specialty "Entrepreneurship, trade and exchange activity" |
| | Specialization: Product safety and quality management |
| Educational program official name | Product safety and quality management |
| Diploma type and volume of the program | 240 credits ECTS, term of training 46 months (3 years and 10 months) |
| Accreditation | Ministry of Education and Science of Ukraine, Certificate of accreditation ND №1196398 22.11.2017, expiry date 01.07 2024. |
| Cycle / Level | FQ - EHEA - first cycle |
| | NRC Ukraine – 7 level |
| | EQF – LLL – 6 level |
| Preconditions | Complete secondary education, elementary level of higher education |

| Language of instruction | Ukrainian |
|--|---|
| Program validity period Internet address for permanent placement of the program description | July,1, 2024 https://www.knteu.kiev.ua/ |
| 2. The edu | ucational program aim |
| career development and pro- quality control and food sar production sphere and circu | on in the field of food sciences, creating conditions for ofessional growth in the state control bodies in the field of fety, consumer rights protection, enterprises in the of food plation |
| Subject area (sphere of knowledge, specialty and specialization) (if available) | "Management and administration" "Entrepreneurship, trade and exchange activity" "Product safety and quality management" |
| Educational program orientation | Educational Scientific orientation is aimed at studying the patterns of formation and methods of food and non-food products quality and safety management. Professional accents are HACCP, quality management, processing approach, quality and safety control of food and non-food products. |
| Main focus of the educational program and specialization | Special education in the field of commodity science, enterprises and organizations management systems, nutrition science, quality and safety of food products. Key words: quality management, food quality management, HACCP, ecological management, commodity science |
| Features of the program | The program makes it possible to practice at manufacturing and trade enterprises, consulting organizations in the sphere of enterprise management |

| | systems, state bodies of the consumer goods safety and quality control. | | | | | | |
|--|--|--|--|--|--|--|--|
| 4. Graduate | suitability to employment and further learning | | | | | | |
| Employability | According to the National classifier of the types of economic activities DK 003:2010, and taking into account the labor market requirements the types of professional activities of the Bachelor in commodity science and trade entrepreneurship are: - wholesale and retail trade—G.; - processing industry – O.; - warehousing – H. 52.10; - supply of finished dishes I. 56.2 - business consulting and management – M. 70.22; - technical testing and research – M.71. 20; - activities in the field of higher education K.85.42; According to the National classifier of professions DK 003: 2010, specialist with Bachelor degree in Commodity science and business entrepreneurship can hold the following positions: Product quality inspector; bakery products, fruit-and-vegetable, technical crops and livestock products quality inspector, trade and commodity quality public inspector; inspector for purchasing and quality of agricultural products; quality controller; commodity scientist, purchaser; commodity science inspector, food product inspector. | | | | | | |
| Further learning | Higher level education is possible: Master degree programs in the field of Commodity science, technology, safety and organization of food products circulation. | | | | | | |
| economic activities DK 003:2010, and taking is account the labor market requirements the types professional activities of the Bachelor in commod science and trade entrepreneurship are: - wholesale and retail trade—G.; - processing industry – O.; - warehousing – H. 52.10; - supply of finished dishes I. 56.2 - business consulting and management – M. 70.2 - technical testing and research – M.71. 20; - activities in the field of higher educat K.85.42; According to the National classifier of professis DK 003: 2010, specialist with Bachelor deg in Commodity science and busin entrepreneurship can hold the following position Product quality inspector; bakery products, for and-vegetable, technical crops and livested products quality inspector; trade and commod quality of agricultural products; quality public inspector, trade and commod quality of agricultural products; qual controller; commodity science inspector, food products commodity science inspector, food products and quality science inspector, food products quality and organization of food products circulation. Further learning Higher level education is possible: Master deg programs in the field of Commodity science, technolosafety and organization of food products circulation. 5 - Training and assessment Lectures, laboratory and practical work in small grounds. | | | | | | | |
| Teaching and learning | C, 1 | | | | | | |
| Assessment | In accordance with the Regulations of the students educational process organizing, approved by the Academic Council of KNUTE on June, 23, 2016. | | | | | | |

| | 6 Program compotence |
|--------------------------|--|
| | 6. Program competence |
| Integral competence (IC) | The ability to solve typical specialized tasks in the sphere of enterprise quality management and safety management which involves the application of provisions and methods of the relevant science, acquired professional knowledge and is characterized by uncertainty of conditions. |
| General competence (GC) | Competence defined by the higher education standard of specialty: |
| | GC 1 Ability to abstract thinking, analysis and synthesis GC 2 The ability to apply knowledge in practice |
| | GC 2 The donky to apply knowledge in practice |
| | GC 3 The ability to communicate in foreign language. |
| | GC 4 Knowledge and understanding of the subject sphere and professional activity |
| | GC 5 The ability to communicate in the official language, both verbally and in writing. |
| | GC 6 The ability to study and gain proficiency in modern knowledge |
| | GC 7 The ability to search for , to process and analyze information from different sources . |
| | GC 8 The ability to find out, set and solve the problems |
| | Competence defined by the higher educational institution: |
| | GC 9 The desire to protect and preserve the environment |
| | GC 10 The ability to make reasonable, scientifically-based solutions. |

| GC 11 The ability to professional communication with non-professionals in the business |
|---|
| GC 12 The desire for health, well-being and safety. |
| |
| Competence defined by the higher education standard |
| PC 1 The ability to demonstrate and use knowledge in commodity science, goods production technology, management, economics, and trade market |
| PC 2 The ability to provide legal support for activities related to goods safety and quality management |
| PC 3 The ability to carry out activities as to goods safety and quality management |
| PC 4 The ability to define the necessity for security measures as to goods safety and quality .management |
| PC 5 The ability to organize the fulfillment of sanitary-hygienic requirements, programs-prerequisites for implementing food safety systems on the principles of HACCP |
| PC 6 The ability to organize the preparation and maintenance of quality and safety management systems of flow of documents in accordance with the ISO standards and other systems |
| PC 7 The ability to control products quality at all stages of the product life cycle. |
| PC 8 The ability to use automated control systems in the organization product safety and quality management. |
| Competence defined by the higher educational institution |
| PC 9 The ability to provide education and staff training on quality and safety management issues. |
| PC 10 The ability to carry out measures to control the implementation of outsourcing activities in the management system |

PC 11 The ability to monitor the implementation of measures as to dangerous factors management in the HACCP system

PC 12 The ability to determine the compliance with sanitary measures of the current national, international and domestic requirements.

PC 13 The ability to collect and analyze original information on management system functioning.

PC 14 The ability to perform the program of choosing samples to control goods and raw materials quality and safety.

PC 15 The ability to exercise control the personnel duties performance within the framework of enterprise management systems.

PC 16 The ability to substantiate the level of implementation of national requirements in the field of goods quality and safety, to communicate with representatives of the controlling bodies.

7 – Program learning outcomes

Program learning outcomes defined by the specialty standard of higher education:

PLO 1 To explain the essence and principles of society development, nature and thinking.

PLO 2 To operate with philosophical categories and concepts

PLO 3 To assess and forecast social, economic, political, ecological, cultural and other events and phenomena.

PLO 4 To define the priorities of personal and professional development on the basis of forecasting of dynamics and socio-economic and cultural environment development

PLO 5 To analyze and compare socially important problems and processes. PLO 6 To identify socio- economic phenomena PLO 7 To analyze historical events and processes. PLO 8 To understand the essence of forming and maintaining of goods consumption features during the commodity movement in order to guarantee safety and quality of a product to the final consumer. PLO 9 To organize trade and technological process. PLO 10 To organize work according to the current legal acts and normative documents. PLO 11 To create a communication network for information exchange and feedback. PLO 12 Substantiate managerial decisions and ensure their eligibility. PLO 13 Communication in a foreign language to ensure effective professional activity. PLO 14 The ability to communicate with experts from other industries PLO 15 To determine the level of implementation, improvement necessity and proper fulfillment of sanitary and hygienic requirements during the commodity circulation Program learning outcomes defined by the higher

| | 1 2 1 2 2 |
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| | educational institution : |
| | PLO 16 To use methods of quality management at the enterprise. |
| | PLO 17 To organize preparatory measures for enterprise and goods certification activities in the relative systems. |
| | PLO 18 To support measures to fulfill the obligatory requirements as to standardization and metrology activity at the enterprise. |
| | PLO 19 To analyze condition and dynamics of the product demand, maintain customer feedback in order to improve product safety and quality management measures. |
| | PLO 20 To plan the need for resources (material, financial, labor) to implement product safety and quality management measures. |
| 8 – Res | ource support for program implementation |
| Staff support | Staff support meets license stipulations for conducting informative activities of educational institutions. 100% of teaching staff with scientific degree and/or academic degree are involved in the program realization. Pedagogical workers are involved in advanced professional training every five years. |
| Material and technical support | Educational premises, residential, sports facilities that conform sanitary norms and regulations, state construction norms of Ukraine. |
| Information and educational-methodical support | Prevailing (Distributed) office software MS Office package, test programs developed in KNUTE, Moodle platform for distance learning, professional programs for simulating of dangerous factors dynamics and developing measures for their open access to FDA, FAO organizations management are used during the training. Each discipline is provided with the educational- |

| | methodical complex, which compulsory includes: program and work program of the discipline, methodical recommendations for the students' actual study(self-study) of the discipline, lectures outlines, methodical recommendations for carrying out practical works and/or laboratory workshops, a tutorial for fulfillment (preparation) of the final qualification work as well as selectively (optionally) collection of testing tasks and situational exercises, methodical instructions for completion (conducting) term papers (undergraduate thesis), textbooks. |
|-------------------------------|--|
| 9 | - Academic mobility |
| National credit mobility | Is carried out in accordance with the Regulations on the procedure for implementing the right for mobility in KNUTE. Is realized in accordance with the needs. |
| International credit mobility | Organization of Bachelors credit mobility (except for the first-year students). Cooperation (collaboration) agreements, including partner exchange and students tuition agreements were signed (concluded) with the following higher educational institutions: University of Auvergne (Clermont-Ferrand, France), University Paris Creteil (Paris, France), Audencia Business School (Nantes, France), Grenoble Alpes University (Grenoble, France), ESCP Europe (Paris), University of Central Lancashire (Preston), Cracow University of Economics (Krakow), Poznan University of Economics and Business (Poznan), Wroclaw University of Economics (Wroclaw), University of Hohenheim (Stuttgart), University of Bremen (Bremen), Vyurtsburg University of Applied Sciences (Vyurtsburg) International programs and project partners in Erasmus+framework are: Cracow University of Economics (Krakow, Poland), Shchetsinky University (Poland, Shchetsin), Audencia Business school(France, Nantes), Grenoble Alpes University (France, Grenoble), Paris Est Kretey University (France, Paris), University of Central Lancashire (Great Britain, Preston), University of Hohenheim (Germany, Suttgart), University of Piraeus (Greece, Piraeus), Klyment Okhrydskiy University (Bulgaria, Sofia) |
| Training of overseas students | Provided |

List of educational program components

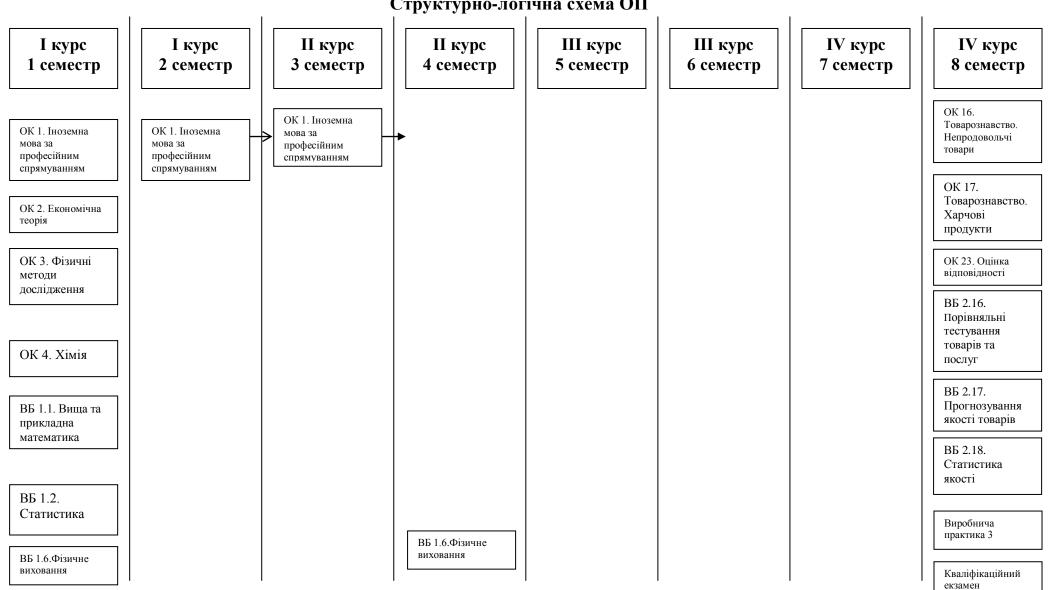
| Code | Components of educational program (| Amount of | forms of |
|--------|---|-----------|----------|
| | academic disciplines, term projects (| credits | final |
| | papers),placement qualification exam, final qualification work) | | control |
| 1 | 2 | 3 | 4 |
| | Ccompulsory components of EP | | |
| | * * * | | |
| CC1. | Foreign Language for Professional Purposes | 21 | Exam |
| CC 2. | Economic Theory | 6 | Exam |
| CC 3. | Physical Methods of Investigation | 6 | Exam |
| CC4. | Chemistry | 6 | Exam |
| | | 6 | |
| CC 5. | Jurisprudence | 6 | Exam |
| CC 6. | Office Computer Technologies | | Exam |
| CC 7. | Philosophy | 6 | Exam |
| CC 8. | Life safety | 4,5 | Exam |
| CC 9. | Microbiology | 6 | Exam |
| CC 10. | Standardization, Metrology and Quality Management | 6 | Exam |
| CC 11 | Theoretical Foundations of Commodity Science | 6 | Exam |
| CC 12. | Trade Economics | 6 | Exam |
| CC 13. | Trade Organizing | 6 | Exam |
| | | | |
| CC 14 | Food Technology | 6 | Exam |

| CC 15. | Marketing | 6 | Exam |
|----------|--|--------|------------------|
| CC 16. | Commodity Science. Non-foods (Including term project) | 15 | Exam |
| CC 17. | Commodity Science. Food staffs. | 10,5 | Exam |
| CC 18. | Hygiene and Sanitation. (including term project) | 6 | Exam |
| CC 19. | Accounting | 4,5 | Exam |
| CC 20. | Management | 6 | Exam |
| CC 21. | Safety of Goods | 6 | Exam |
| CC 22. | Financial and Economic Activity of the Enterprise Modeling. | 6 | Exam |
| CC23. | Conformity valuation | 6 | Exam |
| Total an | nount of compulsory components: | 180 (* | 75%) |
| | Optional components of EP | | |
| OP 1.1. | Higher and Applied Mathematics | 6 | Exam |
| OP 1.2. | Statistics | 6 | Exam |
| OP 1.3 | History of Ukraine | 6 | Exam |
| OP 1. 4. | History of Ukrainian Culture | 6 | Exam |
| OP 1.5 | Ukrainian Language (for professional purposes) | 6 | Exam |
| OP 1. 6. | Physical training | | Credit (test) |
| OP 2.1 | Material Science and the Fundamentals of Goods Production Technology | 6 | Exam |

| OP 2.2 | Fundamentals of Physiology and Hygiene nutrition | 6 | Exam |
|-------------|--|-------|------|
| OP 2.3. | Electronic Workflow | 6 | Exam |
| OP 2.4. | Instrumental Research Methods | 6 | Exam |
| OP 2.5. | Management Psychology | 6 | Exam |
| OP 2.6. | Sensory Analysis 6 | | Exam |
| OP 2.7. | Stock Trading | 6 | Exam |
| OP 2 8 | Consumer Rights Protection | 6 | Exam |
| OP 2. 9 | Logistics Business Law | 6 | Exam |
| OP 2.10. | | | Exam |
| OP2.11. | Metrical Means | 6 | Exam |
| OP2.12 | Food production Processes and Devices | 6 | Exam |
| OP2.13 | Commodity Science. Services | 6 | Exam |
| OP 2.14 | Consumer Loyalty Management | 6 | Exam |
| OP2.15 | HR Management | 6 | Exam |
| OP 2.16 | Comparative Testing of Goods and Services | 6 | Exam |
| OP2.17. | Goods Quality Forecasting | 6 | Exam |
| OP2.18. | Quality Statistics | 6 | Exam |
| Total vo | lume of optional components: | 60 (2 | 25%) |

| Practical training | | |
|---|--------|-------|
| | 4,5 | |
| Industrial placement 1 | | test |
| | 3 | |
| Industrial placement 2 | | test |
| | 6 | |
| Industrial placement 3 | | |
| | | test |
| | | |
| Attestation | | |
| | 3 | |
| Preparation cfor Qualification Exam and | | Exam |
| Attestation | | |
| | | |
| | 240 (1 | 100%) |
| TOTAL EDUCATIONAL PROGRAM VOLUME | | |

Структурно-логічна схема ОП



The form of attestation of higher education applicants.

Attestation of educational program "Goods safety and quality management" graduates (Attestation of graduates of the educational program "Goods safety and quality management") of specialty 076 "Entrepreneurship, trade and exchange activities" is carried out by the examination commission according to the requirements of the higher education standard after the students have completed the curriculum and results in the granting of an established standard diploma for obtaining an educational degree "Bachelor", specialty 076 "Entrepreneurship, trade and exchange activities", specialization "Goods safety and quality management".

All normative content of specialist training is used during the attestation. The time of attestation is defined by the curriculum and the educational process schedule.

Attestation is carried out in the form of a complex qualification exam. (The form of attestation is the complex qualification exam.)

Students who have fulfilled all curriculum and educational plan requirements (all requirements of the curriculum and educational plan) are admitted to the attestation.

The attestation results are defined by the national scale estimates "excellent", "good", "satisfactory", "unsatisfactory".

Attestation is carried out openly and publicly.

Matrix of correspondence of program learning competence to educational program components

| | OK.1 | OK.2 | OK.3 | OK.4 | OK.5 | OK.6 | OK.7 | OK.8 | OK.9 | OK.10 | OK.11 | OK.12 | OK.13 | OK.14 | OK.15 | OK.16 | OK.17 | OK.18 | OK.19 | OK.20 | OK.21 | OK.22 | OK.23 | BE 1.1 | BE 1.2 | BE 1.3 | BE 1.4 | BE 1.5 | BE 1.6 | BB 2.1 | BB 2.2 | BE 2.3 | BB 2.4 | BE 2.5 | BB 2.6 | BB 2.7 | BE 2.8 | BE 2.9 | BE 2.10 | BB 2.11 | B5 2.12 | BE 2.13 | BB 2.14 | BB 2.15 | BB 2.16 | BE 2.17 | B5 2.18 |
|-------|------|-------|-------------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| GC 1 | CC1 | l cCC | C C 3 | | CC5 | | | | | | | | | | | | | | | | | | | oc• | | • | • | • | | | • | | | • | | | | | | | | | | | | | |
| GC 2 | | | • | | • | | | • | | | | | | | | | | | | | | • | | | | | | | | | | | • | | • | | • | | • | | | | • | • | • | • | |
| GC 3 | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GC 4 | | • | • | | • | | | | • | • | • | • | • | • | • | • | • | • | | • | • | | • | | | | | | | • | • | | • | • | • | | | • | | • | • | ٠ | | • | • | • | • |
| GC 5 | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GC 6 | | | | | | • | • | | | | | | | | | | | | | • | | | | • | • | | • | | | | | | | • | | | | | | | | | | • | • | | |
| GC 7 | • | | | | | • | • | | | | | | | | | | | | | • | | | • | | • | • | • | | | | | • | | • | | | | | | • | | | | | • | • | • |
| GC 8 | | | | | • | | | • | | | | | | | | | | | • | • | | • | • | | | | | | | | | | | • | | | | | • | | | | | • | • | | |
| GC 9 | | | | • | | | | • | • | | | | | | | | | • | | | • | | | | | • | • | | | | • | | | | | | • | | | | | | | | | | |
| GC 10 | | • | | | | | • | | | | | | | | | | | | | | | | | | | • | • | ٠ | | | • | | | • | | | | | | | | | | | | | |
| GC 11 | • | | | | | | | | | | | | | | | • | • | | | | | | | | | | • | • | | | | | | • | | | | | | | | ٠ | | | | | |
| GC 12 | | | | • | | | | • | | | | | | | | | | • | | | • | | | | | • | • | | | | • | | | | | | • | | | | | | | | | | |
| PC 1 | | | | | | | | | • | • | • | • | • | • | • | • | | • | • | | | | | | | | | | | • | • | | • | • | | • | | • | | • | • | | | | • | • | \Box |
| PC 2 | | | | | | | | | | • | | | | | | | | • | | | | | | | | | | | | | | | | | | | | | • | | | | | | | | |
| PC 3 | | | • | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | ٠ | | | | | | | | | | | ٠ | | • | |
| PC 4 | | | | | | | | | | • | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | • | | | | ٠ | | • | • |
| PC 5 | | | | • | | | | | | | | | | | | | | • | | | • | | | | | | | | | • | | | • | | | | | | | | | | | | | T | |
| PC 6 | • | | | | • | | | | | | | | | | | | | | • | • | | | | | | | | • | | | | | | | | | | | | | | | | | | | П |
| PC 7 | | | | | | | | | • | • | | Ī | | • | | | • | • | T | | | | • | | | | | | | • | | | | | ٠ | | | | | • | ٠ | | | | ٠ | • | П |
| PC 8 | | | | | | | | | | | | İ | | | | | | | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | \prod |

| PC 9 | | | | | | | | | | | | | | • | | | | | | | | | | • | | | | | | | | • | | |
|-------|--|----|----|----|--|---|---|---|--|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|---|---|--|---|---|---------|
| PC 10 | | • | | • | | | | • | | | • | • | • | • | | • | | | | | | • | | | • | | • | | • | | | | ٠ | |
| PC 11 | | ٠ | | | | | | | | | | | • | | | | | | • | | • | | • | | | | | | • | • | | | | \prod |
| PC 12 | | | | | | | | | | | | | | | · | | | | | | | | | | | | | | | | | | | \prod |
| PC 13 | | • | | | | | • | | | • | • | • | • | | • | • | • | • | | | • | • | • | | • | | | | • | • | | | | |
| PC 14 | | ١. | ١. | ١. | | | • | | | | • | • | | | • | | | • | | | | | | | | | | | • | | | | • | П |
| PC 15 | | | | | | • | | | | | | | | | | | | | | | | | | ٠ | | | | | | | | ٠ | | |
| PC 16 | | | | ٠ | | • | • | | | | | | • | | • | | | | | | | | | | | | | • | | | | | | |

Matrix for providing program learning outcomes (PLO) with relevant components of the educational program

| | | <u> </u> | providing | | | | <u>P-</u> | <u> </u> | | | <u> </u> | | <u>8</u> | U | | <u> </u> | - | <u> </u> | | <u> </u> | *** | <u> </u> | 10 | 10 1 | u | | 011 | <u> </u> | | | 5 0 | | | | uc | - | | | <u> P</u> - | <u>vs</u> | | | | | | | |
|----------|----------|----------|-----------|------|------|------|-----------|----------|------|-------|----------|-------|----------|--------------|-------|----------|-------|----------|-------|----------|------|----------|-------|--------|-------|-------------|------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|
| | CC 0 K.1 | OK.2 | OK.3 | OK.4 | OK.5 | OK.6 | OK.7 | OK.8 | OK.9 | OK.10 | OK.11 | OK.12 | OK.13 | OK.14 | OK.15 | OLUTO | OK.17 | OK.18 | OK.19 | OK.20 | OK21 | OK.22 | OK.23 | BB 1.1 | OC BE | OCBE 1.3 | O O BE 1.4 | BE 1.5 | BB 1.6 | BB 2.1 | B5 2.2 | BE 2.3 | BE 2.4 | BB 2.5 | BE 2.6 | BB 2.7 | BE 2.8 | BE 2.9 | BE 2.10 | BE 2.11 | BE 2.12 | BE 2.13 | BE 2.14 | BB 2.15 | BB 2.16 | BB 2.17 | BE 2.18 |
| PLO 1 | | | | | • | | • | | | | | | | | | | | | | | | | | | | • | • | | | | • | | | | | | | | | | | | | | | | |
| PLO 2 | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PLO 3 | | • | | | | • | • | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PLO 4 | | | | | | | • | | | | | | | | | | | | • | | | | | • | | • | • | | | | • | | • | | | | • | | | | | | • | • | | | |
| PLO 5 | | • | | | • | | | • | | | | | | | | | | | | | | | | • | | • | • | | | | | | • | | | | | | | | | | | | | | |
| PLO 6 | | • | | | • | | | • | | | | | | | | | | | | | | | | | | • | • | | | | | | • | | | | | | | | | | | | | | |
| PLO 7 | | | | | | • | | • | | | | | | | | | | | | | | | | | | • | • | | | | | | | | | | | | | | | | | | | | |
| PLO 8 | | | | • | | | | | • | | • | | | • | | • | • | • | | | • | | | | | | | | | • | • | | | | • | | | • | | | | | | | | • | |

| PLO 9 | | | | | | | | | | | | | | • | | | | | | • | | | | | | | | • | | | | • | • | • | | | | • | • | • | • | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PLO 10 | | | | • | | • | | | | | | | | | | • | | | | | | | | | | | | | | | | | | | • | | | • | | | | | |
| PLO 11 | • | | | | | | | | | | | | • | | | | | | | | • | | | | • | | | • | | • | | | • | | | | | | • | • | | | • |
| PLO 12 | | | | • | | | | | | | | | | | | | | • | | | | | | | | | | • | | • | | | • | | • | | | • | • | • | | | |
| PLO 13 | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PLO 14 | • | | • | • | | | • | | • | • | • | • | • | • | | • | | | | | | | | | • | • | • | | | • | | • | | • | • | | • | • | | | • | • | • |
| PLO 15 | | • | • | | | | • | • | • | | | • | | • | | • | | | | | • | | • | | | | | | • | | • | | | | | • | • | | | | • | | • |
| PLO 16 | | | | | | | | • | | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | • | | • | • |
| PLO 17 | | | | | | | | • | | | | | | | | • | | | • | | • | | | | | | | | | | | | | | | | | | | • | | | • |
| PLO 18 | | | • | | • | | | • | | | | | | | | • | | | | | • | | | | | | | | | | | | | | | • | • | | | | • | | • |
| PLO 19 | • | | | | • | | | | | • | • | | • | • | • | | • | | | • | • | • | • | | | | | • | | | | • | • | | | | | | • | | • | • | · |
| PLO 20 | | | | | • | • | • | | | • | • | | • | | | • | • | • | • | • | | • | • | | | | | | | | | | | • | | • | • | | | • | | | • |