

**DEGREE COURSE OF MODELLING, TECHNOLOGIES AND MANAGEMENT
IN THE SEWING INDUSTRY
CURRICULUM**

OVERVIEW OF THE MAJOR

In the rapidly changing socio-economic and scientific technical characteristics of the professional environment before the preparation of the personnel called upon to carry out industrial politics in the field of the sewing industry is facing serious challenges and important tasks. The major "Modeling, technology, and management in the sewing industry" meets modern requirements and expectations of society by training highly qualified specialists in engineering education for the apparel industry.

The graduates from major "Modeling, technology, and management in the sewing industry" with Bachelor's degree obtain professional competence for design and production of sewing and textiles, repair and maintenance of sewing machines, design of technological processes, development of design, technological and feasibility documentation, using modern computer systems, doing business and logistics, carrying out research in the field of the sewing industry.

The developed training documentation of the program is in line with the latest developments in technical, technological, and economic improvement of the sewing industry, taking into account the international experience and the preservation of national traditions and achievements in the field of design, production and management of textile and sewing products.

ORGANIZATION OF TRAINING

Studies last for 4 years (8 semesters). The curriculum has a total workload of 2400 hours and provides a total of 240 ECTS credits, which are evenly distributed equally in each of the eight semesters in accordance with state requirements (Article 44 of the Law on amendment and supplement of the Higher Education Act - SG. 48 / 04.06.2004, and the Ordinance № 21 from 30.09.2004 for the application of the system of accumulation and transfer of credits in higher education institutions - SG. 89 / 12.10.2004).

In the structure of the curriculum are included required, elective, and compulsory subjects:

Required subjects (2040 hrs. - 212 credits), which provide the building of base theoretical and specialized platform in preparation for major "Modeling, technology, and management in the sewing industry."

Students gain knowledge with general, general technical, fundamental, professional and practical character, which include:

- Knowledge, forming the necessary broad theoretical and general technical foundation in the field of applied mathematics, engineering physics, materials science, engineering graphics, statics and resistance of materials, mechanics, theory of machines and mechanisms, machine parts, electrical engineering, mechanical engineering technology, information technology and the use of ready software products;

- Wide-profiled professional and practical knowledge and skills in textile materials science and testing, machines and processes in spinning, weaving, knitting, organizing the sewing production, technical safety and ecology, decorative painting and design, construction and modeling of clothing, machinery and processes in sewing production, technology of clothing, designing clothes, sewing production automation, processing lines in the sewing industry and a significant volume of practical knowledge.

Elective courses (300 hrs. - 28 credits) that enable it to be expanded and upgraded general theoretical and specialized training in the major. During the course of the elective subjects the students are provided with conditions for deepening and enriching the specification of the acquired knowledge and developed skills and competence within the required subjects.

The compulsory courses provide an opportunity to enrich their knowledge, skills and competences of students in dependence of the diverse focus of their interests. This is accomplished within 240 hours, which represent 10% of the curriculum.

The graduation of students requires taking State examination of the major or thesis defense, with which they acquired 10 credits (Art. 10 of Ordinance № 21 of 30.09.2004).

EDUCATIONAL GOALS OF THE MAJOR

The Bachelor's program "Modeling, technology, and management in the sewing industry" aims to prepare professionals for research, designing, construction, technology, management and production activities, as well as control activity and quality management, trade and logistics in all phases, processes and areas of the contemporary sewing industry.

In accordance with Art. 4 of the Regulation on state requirements for acquiring higher education in the educational degrees "bachelor", "master" and "specialist" (SG. 76 of 6.08.2002) the training of the major provides building of the future engineers in the sewing industry with the following competencies:

- Wide-profile theoretical knowledge and practical skills:
 - Has general scientific training related to current and prospective orientation of technical and natural scientific knowledge;
 - Has, at the required level, wide-necessary level of theoretical knowledge and practical skills and habits, allowing successfully to organize production process in a sewing company or its unit; supervise and coordinate the activities of the employees in the unit; to exercise control in the production and deployment of new clothing items; analyze and apply creative global technical expertise; develop and participate in the development and shaping of design and technological documentation; to use a computer and measuring equipment; reads and develops technical documentation for the maintenance and servicing of sewing machines;
 - Know and mastered conceptual and terminological system of sewing and textile industry;
 - Has a comprehensive picture of the nature of the professional field and the major by applying the rational organization of labor and legislation in the field of modeling, technology and management of sewing production;
 - Use modern computer equipment for the automation of its labor and business;
 - Used up-to-date scientific and technical information in the absorption of new product or new technological equipment, as well as for self-study;
 - Knows how to analyze and report the results of its operations and how to flexible rebuild it.
- Ability to adapt in accordance with the changing conditions of the work environment:
 - Develop, improve their engineering skills and knowledge in the field of design, modeling and the technology of sewing products, their logistical, communicational, organizational, measurement and other abilities and work continuously for his self-education;
 - Selects and creatively interpret scientific information in various sources;

- Has research strategies, through which he will achieve on high scientific level empirical and theoretical work on specific creative projects;
- Can transfer knowledge and technology, to operationalize, to technically analyze and implementing practical modern theoretical achievements.
 - Skills for independent professional work and teamwork:
 - Able to independently plan and organize professional technical and technological activities in the sewing industry;
 - Can navigate independently in the theoretical and applied achievements and innovations in the theory and practice of sewing production;
 - Knows and can apply diagnostic methodologies, to prepare and carry out independent research in the field of sewing and textile industry;
 - Value professional cooperation and mutual assistance and can work effectively in a teamwork setting.
 - Formation of personal and professional qualities

A result of the academic training in their major is building a comprehensive professional technical culture of engineer in the sewing industry, which finds expression in the formation of significant professional and personal qualities such as self-improvement of the knowledge and skills, training through self-learning, company training, postgraduate training or continuing education in the following degrees; creative application of knowledge and skills in the midst of rapidly changing fashion trends, structure and composition of textile materials, machinery, equipment and technologies for their processing; technical precision and more.

- Educational mobility and international comparability of the acquired competences.

In substantive and organizational aspect of education in "Modeling, technology, and management in the sewing industry," the introduced credit system and the system of the quality of education allow the prepared engineers to be competitive in the labor market in the country, to improve their skills and to continue their education in Bulgaria and beyond its borders.

QUALIFICATION AND CARRER DEVELOPMENT

The students who successfully complete their training in the major "modeling, technology, and management in the sewing industry" with the degree "Bachelor" acquire professional qualification "engineer in the sewing industry." They are prepared to work in all private, corporate and governmental companies, work in manufacturing companies and units of textile and clothing items such as process engineers, production engineers, designers of clothing, specialists in repair and operation of sewing machines - conventional and automated, production processes; to develop their own business and manage small and medium textile and sewing companies; perform business and logistics; be teachers in vocational schools after acquiring additional teaching qualification.

Students who completed training in the major will work occupying the following positions from the national classification of occupations and qualifications in the Republic of Bulgaria (2012.):

organizer and manager of medium and small companies; contractor models, technologist apparel, textiles, leather haberdashery production/, technician-mechanic/clothing production, production automation/, technician for the control of production process for the production of textiles and clothing, technician production, production results and production structures, stylist-designer of clothes, designers and cutters of clothing and the related, quality tester, tester /clothing fabric/, inspector /quality of products, quality of production processes/, assessor /clothing/, controller quality, professional quality specialist, specialist in maintenance and repair of textile and clothing machinery, specialist control functions - foreman, organizer of production, foreman, warehouse foreman,

manager; specialist and technician in companies related to commercial, logistics and design activities; leaders in business services and administrative activities - Manager, Infrastructure and Logistics in a factory /sewing/.

The graduate with bachelor's degree "engineer in the sewing industry" has the opportunities:

- To specialize in different forms of postgraduate and continuing education;
- To continue their education in degree "Master".

**DEGREE COURSE OF MODELLING, TECHNOLOGIES AND MANAGEMENT
IN THE SEWING INDUSTRY**

CURRICULUM

| First academic year | | | |
|---|--------------|--------------------------------------|--------------|
| First semester | ECTS credits | Second semester | ECTS credits |
| Engineering Mathematics – part 1 | 6 | Engineering Mathematics – part 2 | 6 |
| Clothing design | 6 | Engineering Physics – part 2 | 6 |
| Metrology and Measuring Equipment | 5 | Information Technologies in | 4 |
| Engineering Graphics | 5 | Textile and Sewing Manufacture | |
| Engineering Physics – part 1 | 5 | Manufacturing Engineering | 4 |
| Foreign Language – part 1 | 3 | Materials Science | 4 |
| Sport | | Elective discipline I group - | 3 |
| | | Educative Practice 1 | |
| | | Types of stitches | |
| | | Production of little details | |
| | | Foreign Language – part 2 | 3 |
| | | Sport | |
| | Total: 30 | | Total: 30 |
| Second academic year | | | |
| First semester | ECTS credits | Second semester | ECTS credits |
| Mechanics | 5 | Machine Elements | 6 |
| Strength of Materials | 6 | Theory of Machinery and | 5 |
| Engineering Mathematics – part 3 | 6 | Mechanisms | 7 |
| Clothes Technology – I Part | 7 | Clothes Technology – II Part | 5 |
| Textile Materials Science and Textile Tests | 6 | Educative Practice 2 - | |
| | | Manufacture of details and | 7 |
| | | assemblies | |
| | | Clothes Construction and Design – | |
| | | I Part | |
| | Total: 30 | | Total: 30 |

| Third academic year | | | |
|----------------------------|--------------|-----------------|--------------|
| First semester | ECST credits | Second semester | ECST credits |
| | | | |

| | | | |
|--|--------------|--|--------------|
| Electrical Engineering and Electrically-Operated Movers | 5 | Machinery and Processes in Knitting Manufacture | 6 |
| Processes and machinery in spinning and weaving production | 8 | Sewing Machinery and Equipment | 7 |
| Clothes Construction and Design – II Part | 7 | Elective discipline II group | 6 |
| Technical Safety and Ecology | 5 | Construction of Clothes with Complex Inner Structure | |
| Educational Practice 3 - Production of Belt Products | 5 | Construction of a products of resilient materials | |
| | | Educative Practice 4 - Production of Arm Products | 6 |
| | | Elective discipline III group | 5 |
| | | Financing and investing a small company | |
| | | Legal and regulatory framework for small and medium businesses | |
| | Total: 30 | | Total: 30 |

| Fourth academic year | | | |
|--|--------------|--|--------------|
| First semester | ECST credits | Second semester | ECST credits |
| Automation of Sewing Manufacture | 8 | Flow lines in the sewing industry | 4 |
| Educative Practice 5 - Production of Boutique Products | 3 | Elective discipline V group | 3 |
| Integrated design and manufacture of clothing | 7 | Industrial Management | |
| Advanced technologies in Sewing Manufacture | 5 | Management and Marketing in Sewing Industry | |
| Elective discipline IV group | 7 | Elective discipline VI group | 4 |
| Finishing of the Textile and sewing products | | Educative Practice 6 - Production of Cloths with Complex Structure | 4 |
| Non-Woven Textile Products | | Production practice | 5 |
| | | GRADUATION | 10 |
| | Total: 30 | | Total: 30 |

TOTAL: 240 CREDITS – FOR FOUR ACADEMIC YEARS

MATHEMATICS FOR ENGINEERS I

| | |
|---|---|
| ECTS credits: 6 | Semester: 1 |
| Evaluation: Written exam | Hours per week: 2 + 2 + 0 |
| Course type: Lectures and laboratory exercises | Course status: Compulsory |
| | Degree course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Iliya Gyudjenov, PhD - iliadgl@swu.bg

Assistant: Ch. Assistant Anka Markovska, PhD - a_markovska@swu.bg

Department: Mechanical Engineering and Technologies - technical_mtt@swu.bg

Faculty: Faculty of Engineering - technical@swu.bg

Address: 2700 Blagoevgrad, 66 Ivan Mihailov str.

Phone: +359-73-88 51 62

Annotation:

Training in the academic discipline includes:

In the curriculum deals with the questions of linear algebra, analytic geometry and differential calculus of functions of a real variable. The basic concepts of complex numbers are given. From linear algebra, we study matrices, determinants, systems of linear equations and methods for solving them, linear spaces and linear transformations (operators), square forms of analytical geometry, vectors and actions with them, straight lines and plains, lines and surfaces of the second degree. The main objective of the course is to provide students with a fundamental preparation for mastering other mathematical and technical disciplines.

Purpose of the course:

The purpose of this course is that students can solve systems of linear equations using two methods-Gauss and Kramer formulas, apply the studied modeling theory and solve real practical problems; use one of the classical methods of studying geometric objects - analytical; be able to establish a correspondence between algebraic objects, determine their properties and be able to transfer the same to others that are difficult to study.

Educational Methods:

Conducting conversations and analyses during a lecture course of seminar exercises.

Inscribing for tuition:

The course is studied by all students majoring in Applied Electronic Systems, as it is mandatory.

Inscribing for exam:

Agreement with the lecturer and the Students Service Department.

CLOTHING DESIGN

| | |
|------------------------------------|---|
| ECTS credits: 6 | Hours per week: 2+0+2 |
| Evaluation: current control | Exam type: term assessment |
| Semester: first semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Part-time, Assist. Prof. Tatiana Hristova, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: tatiyna@swu.bg

Assistant: Assist. Prof. Ognyan Georgiev, PhD
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Faculty of Engineering
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Annotation

Description of the course:

The course explores design as an aesthetic activity, creative methods and characteristics of artistic activity in the design of clothing (artistic expression, art imaging techniques and design of various types of clothing) basic art imaging techniques types silhouette shape and compositional structures (rhythm, proportion).

The purpose of the course:

Students must obtain the necessary theoretical knowledge about: the nature and features of modern design; to learn the specific characteristics of artistic design of clothing; to acquire theoretical and practical knowledge and skills using a variety of artistic expressions and creative methods in the design business, to gain certain experience and learn certain general algorithms for solving creative tasks in the field of application- decorative and applied art-design activity in the field of textiles.

Educational methods: Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

METROLOGY AND MEASURING EQUIPMENT

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 2+0+1 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 1st semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Ivan Amudzhev, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: ivan1703@swu.bg

Assistant: Assist. Prof. Eng. Vasil Chobanov
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Annotation:

The course contains the following topics: Basic concepts in meteorology; Indicators for quality and reliability, ways to control; Positioning, attaching and applying. Control operations; Technological, conceptual design and measuring bases; Standardization – essence and principles;

The CI system for measuring units and derivatives used in the production

International Organization ISO; Accuracy in processing;

Dimension chains; Statistical evaluation and distribution laws;

Experimental graphs and dependencies, Interchangeability of smooth cylindrical compounds; Tolerances and assemblies for bearings, gears, screw and other compounds; Accuracy of the form and arrangement of the surfaces; Roughness and waviness; Foundations of the technical measurements - classification of the methods; Types of measuring tools and basic meteorological parameters; Measurement errors

The purpose of the course: (Metrology and Measuring Equipment)

The course aims at acquiring general knowledge in the field of metrology. Explore the commonly used tools for measuring the performance of the machine-building products and monitoring their technical documentation.

Educational methods: Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

ENGINEERING GRAPHICS

| | |
|---|---|
| ECTS credits: 5 | Hours per week: 1+0+3 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 1st semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Evdokia Petkova, PhD
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Assistant: Assoc. Prof. Eng. Evdokia Petkova, PhD
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Annotation:

Course "Engineering Graphics" is designed to introduce students to the methods of image creation and standards related to engineering graphics.

The course is related to training on technical drawing, mathematics and informatics in primary and secondary school.

Students need to master the necessary knowledge and to develop skills and competencies to implement and reading graphic images of geometric and technical objects.

The purpose of the course:

Students should learn the theoretical material, to acquire skills and competences count and prepare sketches, drawings and other design documents to use them in the study of technical disciplines subsequent semesters and in pursuance of their future profession.

Educational methods:

Lectures and practical exercise

PHYSICS FOR ENGINEERS – 1

| | |
|---|---|
| ECTS credits: 5 | Hours per week: 2+0+1 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 1st semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Dimitrina Kerina, PhD – d_kerina@swu.bg
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Phone: +359-73-88 51 62

Assistant: Assoc. Prof. Eng. Raya Stoyanova, PhD – rajkach@swu.bg
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Faculty of Engineering - technical@swu.bg , 2700 Blagoevgrad, 66 Ivan Mihailov
str., *Phone:* +359-73-88 51 62

Annotation:

Main topics of the course are: Basic Concepts of Kinematics and Dynamics, Oscillations and Waves, Dynamics of the Fluids and Basic Concepts of Thermodynamics and Molecular-Kinetics Theory.

Purpose of the course:

The course in Physics for Engineers – I aims to provide knowledge about objective fundamental natural laws, basic Physical methods of investigation and basic Physical concepts and relations.

Educational Methods:

Lectures are prepared on Power point. The contemporary technical equipment as multimedia, software, models, etc. is used for these lectures. Lectures are visualized by demonstrations and laboratory tasks performance during the laboratory classes.

Inscribing for tuition: Not necessary.

Inscribing for exam: Agreement with the lecturer and the Students Service Department

ENGLISH LANGUAGE

| | |
|--------------------------------------|--|
| ECTS: 3 | Semester: 1 |
| Assessment type: Written exam | Classes per week: L-0; S-2; IL-0 |
| Course type: Seminars | Course type: Compulsory |
| | Bachelor: Modelling, Technologies and Management in the Sewing Industry |

Lecturer(s): Chief Assist. Prof. Bilyana Georgieva, PhD
Phone : 073 88 51 63, Email: bilianag@swu.bg

Course Coordinating Department: EEA
2700 Blagoevgrad, Str. Iv. Mihailov № 66,

Annotation:

The aim of the course „Foreign language - English” is to ensure the development of communication skills, reaching of certain phonetic, grammatical, lexical and thematic minimum, skills and habits for participation in real, communicative situations, knowledge and individual work with vocabulary. It aims to review and systematize the basic knowledge of the undergraduates and provides equal start level for the next stage of education, called "language of the programme". The choice of topics is based on their high particularly in the scientific style of speech and their unconditional structural significance and necessity of learning a foreign language. Widely used communicative exercises focus that strengthen the necessary grammatical habits and encourage students to be active speech activity in the studied subjects. The practical course is based on the thematic texts reflecting everyday student life, elementary special technical terminology on the subject and aims to stimulate the desire and motivation of students to enhance their language and consistent level – Elementary and Pre-intermediate.

Course aim: The aim of the course is to build an initial communicative competence, as the ability to understand and draw meaningful oral and written statements, in accordance with the rules of the English language to develop reading skills and comprehension of texts from everyday communication and presentation and related texts the basic terms in the specialty; develop skills in technical vocabulary can make translations of technical texts from English into Bulgarian language using a dictionary.

Education Methods:

Active methods are used through different exercises; based tests are made for control of the learned, translation of technical literature.

ENGINEERING MATHEMATICS – PART 2

| | |
|--|---|
| ECTS credits: 6 | Hours per week: 2+0+2 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 2 nd semester Course Type: lectures and tutorials | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturers: Prof. Oleg Mushkarov DSc ;
Department of Electrical Engineering, Electronics and Automatics,
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: muskarov@math.bas.bg;

Assistant: Chief Assist. Prof. Anka Markovska, PhD;
Department of Electrical Engineering, Electronics and Automatics,
E-mail: a_markovska@swu.bg;

Course Status: Compulsory Course in the Modelling, Technologies and Management in the Sewing Industry B.S.

Course Description: Main topics:

- Integral calculus of functions of one real variable - indefinite integral, basic integration techniques, definite integral - classes of integrable functions, properties of the definite integral
- Functional sequences and series
- Differential calculus of functions of several variables- partial derivatives of first and higher order, local and global extrema of functions of several variables
- Ordinary differential equations
- Integral calculus of functions of several variables- double and triple integrals and their calculation, change of variables, geometric and physical applications
- Path integrals - definition, properties, calculation, applications.

Course Aims:

The course aims to provide mathematical foundations for further study of other general disciplines such as physics, electrical engineering, etc. and all special technical disciplines. This course sets also some educational objectives as the development of algorithmic thinking and capabilities for mathematical modelling of natural phenomena.

Teaching Methods: lectures and lab exercises

Requirements/Prerequisites: Mathematics (Differential Calculus of Function of One Real Variable, Linear Algebra, Analytic Geometry, Differential Equations)

Assessment: written final exam, two problems solving tests per semester

Registration for the Course: Compulsory

Registration for the Exam: coordinated with lecturer and Student Service Department

ENGINEERING PHYSICS – PART 2

| | |
|--|---|
| ECTS credits: 6 | Semester: 2 nd |
| Evaluation: written exam | Hours per week: 2 lectures+2 laboratory exercises |
| Course type: lectures+ laboratory exercises | Course status: Compulsory |
| | Degree course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Dimitrina Kerina, PhD – d_kerina@swu.bg
Department of Communication and Computer Engineering and Technologies –
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Assistant: Assoc. Prof. Eng. Raya Stoyanova, PhD – rajkach@swu.bg
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Annotation:

Main topics of the course are: Electrostatics, Stationary Electromagnetic Field, Alternative Electromagnetic Field, Electromagnetic Phenomena in the Matter, Oscillations and Waves and Optics.

Purpose of the course:

The course in Physics for Engineers – II aims to provide knowledge about fundamental natural laws, electromagnetic and optic phenomena and basic Physical methods for investigations.

Educational Methods:

Lectures are prepared on Power point. The contemporary technical equipment as multimedia, software, models, etc. is used for these lectures. Lectures are visualized by demonstrations and laboratory tasks performance during the laboratory classes.

Inscribing for tuition:

Not necessary.

Inscribing for exam:

Agreement with the lecturer and the Students Service Department

INFORMATION TECHNOLOGIES IN TEXTILE AND SEWING

| | |
|------------------------------------|---|
| ECTS credits: 4 | Hours per week: 1 +0+2 |
| Evaluation: current control | Exam type: Written exam |
| Semester: 2 nd semester | Degree course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Ivanka Georgieva, PhD
Department: "Electrical Engineering, Electronics and Automatics"
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: vanyakg@swu.bg

Assistant: Assist. Prof. Ognyan Georgiev, PhD
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Annotation:

The course on "Information Technology in sewing industry has the task to introduce students to fundamental concepts of information technology. It is focusing on the study of different information technologies used in the business of each sewing company. For example, information technology documentation management, for the organization of the administrative activity, for keeping and accounting of documents, for word processing, analysis information through Excel, for design and construction of sewing articles for preparing and presenting the activities of the sewing company, communication technologies, technologies for working in the Web.

The purpose of the course:

The purpose of the course is to acquire knowledge about the power, possibilities of application and practical skills to work with different software packages for word processing, spreadsheets, CAD/CAM systems, presentations. Students should aware of the need of deployment of information technology in all stages of the sewing industry.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

MANUFACTURING ENGINEERING

| | |
|------------------------------------|---|
| ECTS credits: 4 | Hours per week: 3+0+1 |
| Evaluation: current control | Exam type: Written exam |
| Semester: 2 nd semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
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Annotation:

The Training course includes a study of two modules.

The first module includes engineering technologies for manufacturing of parts, organization and management of industrial enterprises, the main issues on the quality of machine-building products, machinery and processes of cutting and grinding.

The second module contains methods for assembly and special technologies specific to the textile and sewing machines.

The purpose of the course:

(Manufacturing Engineering and Technology for Textile Engineering)

The aim of the course is the acquisition of knowledge in the field of technology for manufacture of mechanical components and related products, including machinery and equipment from the textile and clothing industry.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

MATERIALS SCIENCE

| | |
|------------------------------------|---|
| ECTS credits: 4 | Hours per week: 2+0+1 |
| Evaluation: current control | Exam type: Written exam |
| Semester: 2 nd semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Ivan Amudzhev, PhD
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Annotation:

The course contains the following topics:

Quality indicators, classification and properties of materials associated with the field of their application. Reasons for the destruction of the materials. Mechanical loads and tests. Iron mining and processing.

Casting properties. Receipt and preliminary processing of steel, colored, clean and super clean metals. Methods, equipment and machinery for collecting and pre-processing. Properties of materials associated with their formation and the creation of their shape. Technological properties when casting: viscosity, tendency to liquation etc. Susceptibility to plastic deformation of different materials types. Deformation types and critical voltages. Factors determining plasticity. Tempering and hammering.

Chemical and heat manipulations. Corrosion of materials and methods for prevention and application. Materials, used in the textile and clothing manufacture, sawing electronics and electrical engineering.

The purpose of the course:

(Materials Science)The aim of the course is the acquisition of knowledge in the field of classical and new industrial metals and non-metallic materials for the manufacturing of machine-building products. The course provides the basis in engineering to enable future specialists to exchange and use the technical documentation and to select proper construction and other materials.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

TYPES OF STITCHES

| | |
|------------------------------------|---|
| ECTS credits: 3 | Hours per week: 0+0+3 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 2 nd semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assist. Prof. Elena Blagova, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

Training course includes the study of the technological characteristics and requirements for production of all types of stitches. The students learn about practical approaches in technological solutions for the production of garments with different types of stitches and working with machines and equipment for sewing production.

Purpose of the course:

Students should acquire knowledge of the theoretical foundations and practical methods in the technological sequence in the preparation of various types of stitches for the production of clothing.

Teaching methods:

Instruction, demonstration, exercises, independent work.

Prerequisites:

Basic knowledge of the layout of clothing.

Registration for the course:

It is necessary to submit an application to the academic department at the end of the previous semester.

Registration for the Exam:

Coordinated with the lecturer and academic department

PRODUCTION OF LITTLE DETAILS

| | |
|------------------------------------|---|
| ECTS credits: 3 | Hours per week: 0+0+3 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 2 nd semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assist. Prof. Elena Blagova, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg

ANNOTATION:

Training course includes the study of the technological characteristics and requirements for making different kinds of small details. The students learn about practical approaches in implementation of various technological solutions for making small parts for clothing, as well as working with machines and equipment for sewing production.

Purpose of the course:

Students should acquire knowledge of the theoretical foundations and practical methods of process sequence for the production of various types of small details for the production of clothing.

Teaching methods:

Instruction, demonstration, exercises, independent work, discussion.

Prerequisites:

Basic knowledge of the layout of clothing.

Registration for the course:

It is necessary to submit an application to the academic department at the end of the previous semester.

Registration for the Exam:

Coordinated with the lecturer and academic department

ENGLISH LANGUAGE

| | |
|--------------------------------------|---|
| ECTS: 3 | Semester: 2 |
| Assessment type: Written exam | Classes per week: L-0; S-2; IL-0 |
| Course type: Seminars | Course type: Compulsory |
| | Bachelor: Modeling, Technologies and Management in the Sewing Industry |

Lecturer(s): Chief Assist. Prof. Bilyana Georgieva, PhD

E-mail: bilianag@swu.bg

Course Coordinating Department: EEA

2700 Blagoevgrad, Str. Iv. Mihailov № 66,

Annotation:

The aim of the course „Foreign language - English” is to ensure the development of communication skills, reaching of certain phonetic, grammatical, lexical and thematic minimum, skills and habits for participation in real, communicative situations, knowledge and individual work with vocabulary. It aims to review and systematize the basic knowledge of the undergraduates and provides equal start level for the next stage of education, called "language of the programme". The choice of topics is based on their high particularly in the scientific style of speech and their unconditional structural significance and necessity of learning a foreign language. Widely used communicative exercises focus that strengthen the necessary grammatical habits and encourage students to be active speech activity in the studied subjects. The practical course is based on the thematic texts reflecting everyday student life, elementary special technical terminology on the subject and aims to stimulate the desire and motivation of students to enhance their language and consistent level – Elementary and Pre-intermediate.

Course aim: The aim of the course is to build an initial communicative competence, as the ability to understand and draw meaningful oral and written statements, in accordance with the rules of the English language to develop reading skills and comprehension of texts from everyday communication and presentation and related texts the basic terms in the specialty; develop skills in technical vocabulary can make translations of technical texts from English into Bulgarian language using a dictionary.

Education Methods:

Active methods are used through different exercises; based tests are made for control of the learned, translation of technical literature.

MECHANICS

| | |
|--|---|
| ECTS credits: 5 | Hours per week: 2+0+1 |
| Evaluation: current control, exam | Exam type: written exam |
| Semester: 3 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Raya Stoyanova, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: rajkach@swu.bg

Assistant: Ass. Prof. Eng. Vasil Chobanov
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: vaskochobanov@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The course covers the basic laws of equilibrium in statics and its application mainly in the strength of materials. In this course t are considered the most important issues of kinematics and dynamics of point/law of motion, velocity, acceleration.

The purpose of the course:

The course aims to develop basic theoretical knowledge of statics: forces, systems, resultant of a system of forces, conditions for equilibrium, friction. To lay the foundations for further study of a specific professional field disciplines.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

STRENGTH OF MATERIALS

| | |
|--|---|
| ECTS credits: 6 credits Evaluation: current control, exam Semester: 3 th semester | Hours per Week/FS: 2 lecture hours and 2 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Course Status:

Compulsory course in curriculum of Modelling, Technologies and Management in the Sewing Industry

Course Description:

Teaches the tensions and deformations in the simple cases/tensile, bending, twisting/of loading, as well as knowledge of complex resistance and the longitudinal resistance of the rods.

Course Aims:

The course aims to develop basic theoretical knowledge of resistance of the materials: cutting effort, stress, deformation, basic types of resistance.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

Requirements/Prerequisites:

Mathematics, Engineering Physics, Materials Science.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam:

Coordinated with lecturer and Students Service Department

ENGINEERING MATHEMATICS – III PART

| | |
|---|---|
| ECTS credits: 5 | Hours per week: 2 hours of lectures and 2 hours exercises |
| Evaluation: current control | Exam type: Written exam |
| Semester: 3 rd semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecture: Assoc. Prof. Vassil Grozdanov, PhD
Department: „Mathematics”,
Faculty of Natural Sciences and Mathematics
Phone (+359) 073 88 51 62 E-mail: vassgrozdanov@yahoo.com

Assistant: Chief Assist. Prof. Bojana Garkova, PhD
Department: „Mathematics”,
Faculty of Natural Sciences and Mathematics
Phone (+359) 073 88 51 62 E-mail: big@swu.bg

Address: 66 Ivan Mihailov, 2700 Blagoevgrad, Bulgaria

Annotation:

The course on „Engineering mathematics – III part” considers problems, related with the differential and integral calculation of functions of several variables, ordinary differential equations, Fourier series, integral of Fourier, transformation of Fourier. Also the problems of the operating calculation will be considered. The course gives knowledge of the students that will be necessary for studying many technical disciplines.

Course Aims:

The aim of the course of „Engineering mathematics – III part” is that the students to receive knowledge to solve problems on the teaching material. Also the students must work with the system “MatLab”.

Educational methods:

Lectures, exercises, individual work with scientific literature, textbooks work, individual problem solving and presentations.

CLOTHES TECHNOLOGY – 1ST PART

| | |
|---|---|
| ECTS credits: 7 | Hours per week: 2+0+2 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 3 rd semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical engineering and Technologies
Faculty: Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The training course includes basic issues related to technological sequence and processes used in the manufacture of individual parts and assemblies of sewing products.

The purpose of the course: (Clothes Technology – 1st Part:)

Students to acquire the necessary minimum of theoretical and professional knowledge and skills for the implementation of modern technological methods for the elaboration of details and units of sewing products

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

TEXTILE MATERIALS SCIENCE AND TEXTILE TESTS

| | |
|--|---|
| ECTS credits: 6 credits Evaluation: current control, exam Semester: 3 th semester | Hours per Week/FS: 3 lecture hours and 2 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Part- time, Associate Professor, Eng. Ivelin Rahnev, PhD
Department: Mechanical Engineering and Technologies
Faculty: Faculty of Engineering
Phone: (+359 73) 073 88 51 62,
E-mail: tok.chair@fnst.bg

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical Engineering and Technologies
Faculty: Faculty of Engineering
Phone : (+359 73) 073 88 51 62,
E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Course Status:

Compulsory course in curriculum of Modelling, Technologies and Management in the Sewing Industry

Course Description:

The course is divided into three parts. The first part makes the classification of textile raw materials and covers the different types of textile fibers, their structure, properties, application, basic concepts, characteristics and methods of mathematical statistics, applied for testing of textile materials.

The second part examines the types of yarns and silks and setting their parameters by testing.

The third part examines the structural parameters, assortment of fabrics and the application of types of fabrics, tests are conducted to determine the physical and mechanical, aesthetic and hygienic properties of fabrics. Tests are conducted to determine the physical and mechanical , aesthetic and hygienic properties of fabrics

Course Aims:

Students to acquire knowledge about the types of textile materials, their properties, methods of testing and evaluation.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

Requirements/Prerequisites:

Mathematics; Mechanics; Engineering physics.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

MACHINE ELEMENTS

| | |
|---|---|
| ECTS credits: 6 | Hours per week: 2+0+2 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 4 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva-Kadiyska, PhD
Department: Manufacturing and Textile Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 63, E-mail: bip_k@swu.bg

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva-Kadiyska, PhD
Department: Manufacturing and Textile Engineering and Technologies
Faculty of Engineering
Phone: 073 88 51 63, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

Description of the course:

Studying the types of mobile and immobile compounds, sliding and rolling bearings, main machine details, elastic elements, flexible couplings, clutches, chain, gears, worm gears and gearing, gear boxes and general principles for structural design of machine elements for general use

The purpose of the course: (Materials Science)

The course has the main aim to give practical knowledge on the types of machine elements, ways of coupling them of their construction, design and operational capabilities.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

THEORY OF MECHANISMS AND MACHINES

| | |
|--|---|
| ECTS credits: 5 credits Evaluation: current control, exam Semester: 4 th semester | Hours per Week/FS: 2 lecture hours and 1 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturers: Assoc. Prof. Eng. Raya Stoyanova, PhD, E-mail: rajkach@swu.bg
Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD, E-mail: bip_k@swu.bg
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62

Assistant: Ass. Professor, Eng. Umme Kapanak
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: kapanyk@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Course Status:

Compulsory course in curriculum of Modelling, Technologies and Management in the Sewing Industry

Course Description:

This course provides a description and makes a kinematic analysis and synthesis of mechanisms prevalent in engineering / lever, cam, gearing, gear /. To lay the foundations for further study of specific subjects for professional field.

Course Aims:

Students to acquire practical knowledge of the mechanisms used in the technique and the methods for their analysis, as well as with the specific areas for their application. To lay the foundations for further study of a specific professional field disciplines.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

Requirements/Prerequisites:

Mathematics, Engineering Physics, Mechanics, Machine elements.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

CLOTHES TECHNOLOGY – II PART

| | |
|---|---|
| ECTS credits: 7 | Hours per week: 3+0+2 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 4 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

Training course includes basic issues related to technological sequence and processes used in the making of different type and purpose sewing products.

The purpose of the course: (Clothes Technology – II Part :)

Students to acquire the necessary minimum of theoretical and professional knowledge and skills in the application of modern technological methods to produce functional clothing

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

**EDUCATIVE PRACTICE-2
MANUFACTURE OF DETAILS AND ASSEMBLIES**

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 0+0+3 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 4st semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

The training includes the study of technological and design features and requirements for manufacturing of parts and units of sewing products, technology solutions for manufacturing clothing, as well as use of machinery and equipment in the sewing industry.

The purpose of the course (Educative Practice-Manufacture of details and assemblies):

Students acquire knowledge of the theoretical foundations and practical methods for designing, modeling and technological sequence for making clothing.

Educational methods:

Individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve practical problems, exercise

CLOTHES CONSTRUCTION AND DESIGN – PART I

| | |
|---|---|
| ECTS credits: 7 | Hours per week: 2+0+3 |
| Evaluation: current control, course work | Exam type: term assessment |
| Semester: fourth semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Ass. Prof. Eng. Umme Kapanak
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: kapanyk@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

Foundational discipline covering methods and systems for designing and modeling clothes starting point for preparation of job templates

The purpose of course (Clothes Construction and Design – I Part):

Students will acquire the required minimum of knowledge and skills for sizing, constructing and modeling the basic structures of specific models clothing.

Educational methods

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

ELECTRICAL ENGINEERING AND ELECTRONICS

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 2+0+1 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 5 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Vladimir Gebov, PhD
Department: Electrical Engineering, Electronics and Automatics
Faculty: Faculty of Engineering
Phone: (+359 73) 073 88 51 62, Email: askon@abv.bg

Assistant: Part – time Assistant Velichka Temelkova
Department: Electrical Engineering, Electronics and Automatics
Faculty: Faculty of Engineering
Phone: (+359 73) 073 88 51 62, Email: technical_eea@swu.bg

Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

Training course introduces and familiarizes students with the basic laws and physical phenomena in a wide area of human knowledge- use of electromagnetic phenomena. Give basic passive and active components of electrical circuits. Analyze various electrical machines, principle of operation, parameters and application. Module Fundamentals of electrical apparatus used in the preceding mathematical disciplines, as well as some sections of the course physics. Acquired knowledge serve as the basis for subsequent courses and shape the worldview of future specialists in this field.

The purpose of the course:

To acquaint students with the basics of electrical engineering and as well as the work of electrical machinery and apparatus used in sewing and textile equipment.

Educational methods: Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

PROCESSES AND MACHINES IN THE SPINNING AND WEAVING PRODUCTION

| | |
|--|---|
| ECTS credits: 8 credits Evaluation: current control, exam Semester: 5 th semester | Hours per Week/FS: 4 lecture hours and 2 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturers: Part-time, Assoc. Prof. Eng. Ivelin Rahnev, PhD,

E-mail: tok.chair@fnts.bg

Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD, E-mail: bip_k@swu.bg

Department: Mechanical Engineering and Technologies

Faculty of Engineering, Phone: (+359 73) 073 88 51 62,

Assistant: Assist. Prof. Elena Blagova, PhD, E-mail: elenablagova@swu.bg

Department: Mechanical Engineering and Technologies

Faculty of Engineering, Phone: (+359 73) 073 88 51 62,

Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Course Status:

Compulsory course in curriculum of Modelling, Technologies and Management in the Sewing Industry

Course Description:

The course is divided into two main parts- spinning and weaving. The first part deals with the theoretical foundations and parameters of the processes, tools and methods for spinning short and long fibers. It discusses in detail the ring-spinning, air-jet and open-end spinning systems, and the processes and machinery in the carded and worsted spinning systems. The second part deals with the processes and machines for weaving preparation and construction and analysis of tissues. Examine the processes of winding, warping, sizing, threading, process types and mechanisms of weaving. Emphasis is placed on the application of tissue types in the sewing industry.

Course Aims:

The course objective is to continue and deepen students' knowledge on key processes and machines that perform them in the spinning and weaving production.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

Requirements/Prerequisites:

Textile materials science and textile testing; Mechanics; Theory of Mechanisms and Machines; Engineering physics; Electrical Engineering and Electrically-Operated Movers.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

CLOTHES CONSTRUCTION AND DESIGN – PART II

| | |
|---|---|
| ECTS credits: 7 | Hours per week: 1+0+3 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: fifth semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Ass. Prof. Eng. Umme Kapanak
Department: Mechanical engineering and Technologies
Faculty: Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: kapanyk@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

This course is a continuation and addition to the "Clothes Construction and Design – Part I", it enriches and expands students' knowledge, and help to improve practical skills, acquaints with the methods of transforming them into different sections.

The purpose of the course (Clothes Construction and Design – Part II):

Students to acquire knowledge and skills for sizing, designing and modeling on the fundamental structures of garments with greater complexity, to enrich their theoretical knowledge for the development of details in clothing

Annotation:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

TECHNICAL SAFETY AND ECOLOGY

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 1+0+2 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 5 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Raya Stoyanova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: rajkach@swu.bg

Assistant: Ass. Prof. Eng. Vasil Chobanov
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: vaskochobanov@abv.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The Training course includes study of basic knowledge in ergonomics, including safe and flawless handling of machines and equipment in machine and textile production. Teaches safety when working with the equipment, standards for fire prevention, swift and decisive action in major industrial accidents, damage and natural disasters. Included are various harmful effects typical of textile and sewing production.

The purpose of the course:

To accustom themselves to responsible thinking and behavior, and to act in an environment with increased risk of destruction of the harmful effects of moving mechanical systems, electrical current, accidents, fire, natural disasters and more.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

**EDUCATIVE PRACTICE - 3
PRODUCTION OF BELT PRODUCTS**

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 0+0+4 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 5 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

The training includes the study of technological and design features and requirements for the development of belt products. Practical skills are acquired of technological decisions for the manufacture of textile, as well as working with machines and equipment in sewing production.

The purpose of the course (Educative Practice-Production of Belt Products):

Students must acquire knowledge about the theoretical foundations and practical methods for constructing, designing and technological consistency for making clothing.

Educational methods: Individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve practical problems, exercise

PROCESSES AND MACHINES IN KNITTING MANUFACTURE

| | |
|--|---|
| ECTS credits: 6 credits Evaluation: current control, exam Semester: 6 th semester | Hours per Week/FS: 2 lecture hours and 1 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturers: Part- time, Assoc. Prof. Eng. Ivelin Rahnev, PhD, E-mail:

tok.chair@fnts.bg

Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD, E-mail: bip_k@swu.bg

Department: Mechanical Engineering and Technologies

Faculty of Engineering

Phone: (+359 73) 073 88 51 62,

Assistant: Assist. Prof. Elena Blagova, PhD

Department: Mechanical Engineering and Technologies

Faculty of Engineering

Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg

Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Course Status:

Compulsory course in curriculum of Modelling, Technologies and Management in the Sewing Industry

Course Description:

In the course examines the processes in knitting production, types of knitting machines, knit authorities, knit cross and longitudinal feed thread. It discusses device and construction peculiarities of filing and tensioning systems with fiber for knit and elongation knitting with linear, round knitting and warp machines.

Course Aims:

The aim of the course is for students to learn about the structure, operation, technological capabilities and characteristics of different types of knitting machines and mechanisms for sampling them.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

Requirements/Prerequisites:

Textile materials science and textile tests; Processes and machines in the spinning and weaving production; Mechanics; Theory of Machines and Mechanisms; Engineering physics; Electrical Engineering and Electrically-Operated Movers.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

SEWING MACHINES AND EQUIPMENT

| | |
|------------------------------------|---|
| ECTS credits: 7 | Hours per week: 2+0+2 |
| Evaluation: current control | Exam type: Written exam |
| Semester: 6 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Ivanka Georgieva, PhD
Department: "Electrical Engineering, Electronics and Automatics"
Faculty: Technical faculty
Phone: (+359 73) 073 88 51 62, E-mail: vanyakg@swu.bg

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva-Kadiyska, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The course in "Sewing Machines and Equipment" covers the main issues related to the structure of sewing machines, working organs and mechanisms of sewing machines. For each working organ and mechanism students study: types, functions, and action devices, centering, operating faults and correct them. It focuses on the centering of the main mechanisms of the sewing machine, and on causal relationships determining application of different working organs and mechanisms.

The purpose of the course:

The course objective is students to get solid and profound knowledge of the most commonly implemented universal machines in the sewing industry for their working organs and mechanisms. Each student to acquire a knowledge and practical skills for self-centering mechanisms of sewing machines.

Educational methods:

Lectures, individual work with scientific literature, textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

**EDUCATIVE PRACTICE - 4
PRODUCTION OF ARM PRODUCTS**

| | |
|------------------------------------|---|
| ECTS credits: 6 | Hours per week: 0+0+5 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 6 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

The training includes studying the technological and constructive peculiarities and requirements for development of shoulder products. Practical skills absorbed of technological solutions for the manufacture of cloths, as well as working with machines and equipment in sewing production

The purpose of the course (Educative Practice-Production of Arm Products):

Students to acquire knowledge about the theoretical foundations and practical methods for constructing, designing and technological sequence for making clothing

Educational methods:

Individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve practical problems, exercise

FINANCING AND INVESTMENT OF SMALL COMPANIES

| | |
|--|---|
| ECTS credits: 5 Evaluation: current control | Hours per Week/SS: 1 lecture hours and 2 practical exercises hour per week |
| Semester: 6 th semester | Exam type: term assessment |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva-Kadiyska, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva-Kadiyska, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Course Status:

An optional course of study in curriculum of Modelling, Technologies and Management in the Sewing Industry.

Course Description:

The course examines the types of financings of the company, sources of financing, financing with equity and debt capital, specific forms of financing, investment processes and investment structures.

Course Aims

Purpose of the course is to give basic knowledge of the various alternatives for financing and investing a small company, the correct choice of the source of funding, and assessment and mitigation of risk in making investment decisions.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

Requirements/Prerequisites: Economics.

Assessment: written final exam, two problems solving tests per semester, independent task.

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

LEGAL AND REGULATORY FRAMEWORK FOR SMALL AND MEDIUM BUSINESS

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 1+0+2 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 6 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Raya Stoyanova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: rajkach@swu.bg

Assistant: Assist. Prof. Eng. Vasil Chobanov
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: vaskochobanov@abv.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

In the course examines new trends in management of the property (intellectual and real). Detailed analyzes the legal regime of the different types of traders, ways of lending and cash management

The purpose of the course:

The course of lectures on course Legal and regulatory framework for small and medium businesses aims to familiarize students with the basic principles and legal foundations of small companies and larger enterprises; to give knowledge for streamlining the legal rules governing the diversity and complexity of social relations in national and international commercial transactions; to study the nature of the legal regime of lending to businesses and labor and social relationships.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

AUTOMATION OF SEWING INDUSTRY

| | |
|------------------------------------|---|
| ECTS credits:8 | Hours per week: 2+0+2 |
| Evaluation: current control | Exam type: Written exam |
| Semester: 7 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assoc. Prof. Eng. Ivanka Georgieva, PhD
Department: “ Electrical Engineering, Electronics and Automatics”
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: vanyakg@swu.bg

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva-Kadiyska, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

The training course includes the study of the structural elements of building management systems, the principle of operation of the management systems in modern automated and automatic sewing machines and equipment for sewing production.

The purpose of the course: (Automation of Sewing Industry)

Students to acquire knowledge about the technical means of automation applied in sewing machines, the structural elements of the system for regulation and control of technological parameters of processes, opportunities for building automated management systems for tech sewing lines.

Educational methods: Lectures, individual work and scientific literature, textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

**EDUCATIVE PRACTICE - 5
PRODUCTION OF BOUTIQUE CLOTHES**

| | |
|------------------------------------|---|
| ECTS: 3 | Hours per week: 0+0+3 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 7 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

The training includes studying the technological and constructive peculiarities and requirements for the development of different types of clothing with a complex structure. Students acquire practical skills with technological solutions for the manufacture of clothing, specific handwork as well as working with machines and equipment in sewing production.

The purpose of the course

(Educative Practice-Production of Cloths with Complex Structure Parts):
Students must acquire theoretical knowledge and to learn practical methods for designing, modeling and technological sequence for making clothing.

Educational methods: Individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve practical problems, exercise

INTEGRATED DESIGN AND MANUFACTURE OF CLOTHING

| | |
|--|---|
| ECTS credits: 7 | Hours per week: 1+0+3 |
| Evaluation: current control, course project | Exam type: term assessment |
| Semester: 7 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone:(+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Ass. Prof. Eng. Umme Kapanak
Department: Mechanical engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: kapanyk@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

Training course focuses on the characteristics of the successive stages of development: project design, designing and modeling clothing, costume technology and practical production of clothing items (clothes).

The purpose of the course: (Integrated design and manufacture of clothing):

Students must acquire knowledge about the theoretical foundations and practical methods as well as the technological requirements according to BDS to the consistent development of all stages – design project, design and modeling and process sequence for industrial sewing products as well as skills to use for the purpose advanced specialized software products.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

ADVANCED TECHNOLOGIES IN THE SEWING INDUSTRY

| | |
|--|---|
| ECTS credits: 5 | Hours per week: 1+0+3 |
| Evaluation: current control, course project | Exam type: term assessment |
| Semester: 7 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical engineering
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical engineering
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Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The course involves studying the basic issues of technology of clothing associated with the application of innovative technology options for making up sewing products, innovative methods and tools for improving the quality and productivity of technological processes for the production of various types sewing products.

The purpose of the course:

The course objective is to equip students with knowledge and skills for the practical application of innovative technological processes for manufacturing of parts, structural sections and fashion sewing products, to acquire knowledge and skills to implement of innovative methods for the study of processes to enhance quality and productivity in the sewing industry.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

DRESSING AND FINISHING OF TEXTILE AND CLOTHING ITEMS

| | |
|--|---|
| ECTS credits: 7 credits Evaluation: current control, exam Semester: 7 th semester | Hours per Week/FS: 2 lecture hours and 2 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Part-time, Assoc. Prof. Eng. Ivelin Rahnev, PhD

Department: Mechanical Engineering and Technologies

Faculty of Engineering

Phone: (+359 73) 073 88 51 62, E-mail: tok.chair@fnts.bg

Assistant: Assist. Prof. Elena Blagova, PhD

Department: Mechanical Engineering and Technologies

Faculty of Engineering

Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg

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Course Status:

An optional course of study in curriculum of Modelling, Technologies and Management in the Sewing Industry.

Course Description:

Teaching course includes the study of the processes and techniques used in the preparatory processes, dyeing, textile printing and special methods of closing permanently improvement of textile and sewing products.

Course Aims:

Students acquire knowledge of the theoretical foundations of the chemical processes and the practical application of the most effective methods for their implementation.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

Requirements/Prerequisites:

Engineering physics, Textile materials science and textile tests, Processes and machines in the spinning and weaving production; Processes and machines in knitting manufacture.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturer and Students Service Department

NONWOVEN FABRIC

| | |
|--|---|
| ECTS credits: 7 credits Evaluation: current control, exam Semester: 7 th semester | Hours per Week/FS: 2 lecture hours and 2 practical exercises hour per week Exam type: written exam |
| | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Part-time, Assoc. Prof. Eng. Ivelin Rahnev, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, Email: tok.chair@fnts.bg

Assistant: Assist. Prof. Elena Blagova, PhD
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Course Status:

An optional course of study in curriculum of Modelling, Technologies and Management in the Sewing Industry.

Course Description:

The course considers: the main raw material base, binders, the main types of technology and machinery for the production of nonwovens. Give the principles of operation of the machinery, equipment, units, some features in the structure and properties of products gentrification their testing methods, and fields of application.

Course Aims:

The course aims to acquaint students with the types of technology and machinery for the production of nonwovens.

Teaching Methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

Requirements/Prerequisites:

Engineering physics, Textile materials science and textile tests, Processes and machines in the spinning and weaving production; Processes and machines in knitting manufacture.

Assessment: written final exam, two problems solving tests per semester, independent task and protocols for laboratory exercises

Registration for the Course: by the end of the current semester

Registration for the Exam: coordinated with lecturers and Students Service Department

FLOW LINES IN THE SEWING INDUSTRY

| | |
|---|---|
| ECTS credits: 4 | Hours per week: 2+0+2 |
| Evaluation: current control, course work | Exam type: term assessment |
| Semester: 8 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Prof. Eng. Snezhina Andonova, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: andonova_sn@swu.bg

Assistant: Assist. Prof. Elena Blagova, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering
Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The course includes a study of the operating mode, Fund -time methods for determining consumption rates, selection of appropriate machinery and equipment by type and number, methods for determining the required number of workers and synchronization of loading, and the basic principles for the creation of route schemes for movement of the sewing details to obtain a ready-made product.

Training in the course involves studying the scheme, fund working time, methods for the determination of norms, the choice of the necessary machinery and equipment by type and number; methods for determining the required number of workers and load their synchronization, as well as the basic principles for the creation of route schemes for movement of the sewing details to obtain a ready-made product.

The purpose of the course: (Flow lines in the sewing industry)

The course aims to equip students with knowledge of the aims, objectives and successive stages of the selection rationale and design of technological production lines in ready-made manufacturing. Students need to acquire summarizing knowledge about the organization of the sewing industry, the characteristics of technological lines and their application areas.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation

INDUSTRIAL MANAGEMENT

| | |
|------------------------------------|---|
| ECTS credits: 3 | Hours per week: 2+0+1 |
| Evaluation: current control | Exam type: Written exam |
| Semester: VIII semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering.
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
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Annotation:

The Training course includes a study of two modules.

The first module includes engineering technologies for manufacturing of parts. , Organization and management of industrial enterprises, the main issues on the quality of machine-building products, machinery and processes of cutting and grinding.

The second module contains methods for assembly and special technologies specific to the textile and sewing machines.

The purpose of the course:

The aim of the course is the acquisition of knowledge in the field of technology for manufacture of mechanical components and related products, including machinery and equipment from the textile and clothing industry.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

MANAGEMENT AND MARKETING IN TEXTILE AND SEWING MANUFACTURE

| | |
|------------------------------------|---|
| ECTS credits: 3 | Hours per week: 2+0+1 |
| Evaluation: current control | Exam type: Written exam |
| Semester: VIII semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
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Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg

Assistant: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
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Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 56

Annotation:

The Training course includes a study of two modules.

The first module includes engineering technologies for manufacturing of parts. , Organization and management of industrial enterprises, the main issues on the quality of machine-building products, machinery and processes of cutting and grinding.

The second module contains methods for assembly and special technologies specific to the textile and sewing machines.

The purpose of the course:

The aim of the course is the acquisition of knowledge in the field of technology for manufacture of mechanical components and related products, including machinery and equipment from the textile and clothing industry.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

COMPUTER ART DESIGN CLOTHING

| | |
|---|---|
| ECTS credits: 4 | Hours per week: 1+0+2 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 8 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
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Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 56

Assistant: Assist. Prof. Elena Blagova, PhD
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Phone: (+359 73) 073 88 51 62, E-mail: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov Str. 66

Annotation:

The content of the program covers the main issues related to the use of graphic imaging programs with raster and vector drawing and design of artistic textile design and clothing of different styles and functions.

The purpose of the course:

By the end of this course students will acquire the necessary minimum of theoretical and professional knowledge and skills to use computer programs that will enable them to make and design textiles using different techniques such as printing, weaving, knitting, etc.; and clothing with different styles and functions – everyday, smart, men, women and children fashion.

Educational methods:

Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

CAD / CAM SYSTEMS IN THE SEWING INDUSTRY

| | |
|---|---|
| ECTS credits: 4 | Hours per week: 1+0+2 |
| Evaluation: current control, course work | Exam type: Written exam |
| Semester: 8 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Chief Assist. Prof. Eng. Blagoyka Paleva- Kadiyska, PhD
Department: Mechanical Engineering and Technologies
Faculty of Engineering.
Phone: (+359 73) 073 88 51 62, E-mail: bip_k@swu.bg

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Annotation:

The content of the program covers the main issues related to the producing of tailoring patterns, the scaling of those patterns to different sizes (pattern grading) and arranging them on the fabric in such a manner (a marker) that minimizes the waste of fabric material.

The purpose of the course: By the end of this course, students will acquire the necessary minimum of theoretical and professional knowledge for designing and sizing clothing models with the computer system "Silhouette Designer" and to build different types of clothing using the CAD system.

The purpose of the course:

Educational methods: Lectures, individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve problems, exercise, and Power Point presentation.

EDUCATIVE PRACTICE - 6
PRODUCTION OF CLOTHES WITH COMPLEX STRUCTURE PARTS

| | |
|------------------------------------|---|
| ECTS credits: 4 | Hours per week: 0+0+4 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 8 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assist. Prof. Elena Blagova, PhD
Department: Mechanical Engineering and Technologies
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Phone: (+359 73) 073 88 51 62, Email: elenablagova@swu.bg
Address: 2700, Blagoevgrad, Ivan Mihailov str. 66

Annotation:

The training includes studying the technological and constructive peculiarities and requirements for the development of different types of clothing with a complex structure. Students acquire practical skills with technological solutions for the manufacture of clothing, as well as working with machines and equipment in sewing production.

The purpose of the course

(Educative Practice-Production of Cloths with Complex Structure Parts):
Students must acquire theoretical knowledge and to learn practical methods for designing, modeling and technological sequence for making clothing.

Educational methods:

Individual work and scientific literature textbook exercises, brainstorming and discussion, work individually, solve practical problems, exercise

PRODUCTION PRACTICE

| | |
|------------------------------------|---|
| ECTS credits: 5 | Hours per week: 0+0+1 |
| Evaluation: current control | Exam type: term assessment |
| Semester: 8 th semester | Degree Course: Modelling, Technologies and Management in the Sewing Industry |

Lecturer: Assist. Prof. Elena Blagova, PhD
Department: Mechanical Engineering and Technologies
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Phone: (+359 73) 073 88 51 62, Email: elenablagova@swu.bg
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Annotation:

The training allows students to fulfill the relationship between theoretical knowledge and practical skills taught and implemented throughout the training course, applying them in real production conditions in companies from the industry. Providing an opportunity for research assignments, creative experiments in the actual production of the company

The purpose of course (Production practice):

To make students professional approach to their chosen profession based gained knowledge, practical skill formation for the implementation of technological solutions, build teamwork skills under real production conditions.

Educational methods:

Individual work and scientific literature textbook for exercises, brainstorming and discussion, work individually, solve practical problems, exercises.