

# Erasmus+

010 Training course for  
the educational program

Car upholsterer



Erasmus+





## C. Project of the educational program - modular - general characteristics

### Name and address of the applicant

Newport Group, a.s., Lazaretská 23, 81109 Bratislava

### 1. Name of the educational program

Car upholsterer

### Module names and their range

**Module:** Material for upholstery 40 hours

**Module:** Preparation and processing of material for upholstery 162 hours

**Module:** Upholstery of car interiors 98 hours

### 2. Characteristics of the modular education program

Graduate of the training program knows the correct procedure for the processing of upholstery materials. He can prepare and use the tools, utensils, instruments and machines necessary for upholstery. He can prepare, measure, cut textile, leather, fur and synthetic or other base material. Manually or mechanically fabricates the upholstery by sewing, trimming, coating and completing the products by decorating and fastening the ornaments.

### 3. Reasoning of the justness the modular structure

The modular structure of the education program is based on the need to divide the content into three separately utilizable modules according to the needs of potential target groups.

## C. Project of the educational program - modular - elaboration of module

### Name and address of the applicant

Newport Group, a.s., Lazaretská 23, 81109 Bratislava

### 1. Name of the educational program

Car upholsterer

#### Module name

Material for upholstery

### 2. Organizational form of education

Presence

### 3. Target group

Persons interested in acquiring professional knowledge and practical skills for the performance of car upholsterer

#### 4. Required entrance education:

at least completed primary school

#### 5. Graduate profile

The graduate of the module will gain basic knowledge of the materials used in the upholstery production. He is able to individually select, prepare, use and store the upholstery material required for individual operations.

#### 6. Methods

Lecture

Practical demonstrations

Professional practice

7. Range of module 40,00 hours

#### 8. Teaching schedule

##### Expert guarantor

Ing. Lubomír Jakubík

##### The name of the

professional topic	Number of hours	Theory	Practice	Lecturers
Materials used in upholstery	24	8	16	Jakubík L., Jozeková I.
Assessment and selection of the materials in upholstery	16	4	12	Jakubík L., Jozeková I.
<b>Total</b>	<b>40</b>			

#### 9. Module teaching scheme

##### Materials used in upholstery

Supporting skeletons

- wooden
- metal
- plastic
- combined

Carrier subbase

- flexible
- fixed

Forming materials

- natural
- synthetics

Lightening materials

- natural
- synthetics

Insulation materials

- jute fabrics
- technical fabrics
- meshes

Coating materials

- textile
- non- textile

Auxiliary materials

- connecting
- decorative
- mounting
- packaging

**PROFESSIONAL PRACTICE**

Occupational Health and Safety and Fire protection

Classification of upholstery materials according to use and function in the product

Selection and appropriate use of materials for individual types of products

Storage of particular types of materials

**Assessment and selection of materials in upholstery**

Selection and appropriate use of materials for individual types of products

- Selection and use of seat and backrest materials
- Selection and use of hand and head restraint materials

Storing particular upholstery materials

**PROFESSIONAL PRACTICE**

Occupational Health and Safety and Fire protection

Classification of upholstery materials according to use and function in the product

Selection and appropriate use of materials for particular types of products

Storage of particular types of materials

Písomná skúška - test

Written examination – test

Requested success 60%

Practical exam – working-out project assignment + presentation of the results of the project assignment  
(professional interview)

Requested success min. 70%.

## **11. Material and technical provision**

### **Areas**

The course takes place in modern training areas with audiovisual equipment. Training facilities include workshops whose professional equipment will enable participants in the learning program to acquire practical skills.

### **Technical equipment, teaching aids**

Presentation equipment: projector, screen; PC classroom equipment; magnetic board, flipchart + fixes, blocks and stationery for participants.

Work equipment and tools used in the performance of upholstery work: Materials used in the upholstery (supporting skeletons - wood, metal, plastic, combined, carrier subbases - flexible, solid, natural and synthetic forming materials, natural and synthetic lightening materials, jute fabrics, technical fabrics, meshes, textile and non-textile coating materials, connecting, auxiliary materials ...) machinery and equipment used in upholstery production -

(pulping machines, shearing machines and equipment, punching machines, adhesive applicators, sewing machines, stitching and hemming machines, drawing and coating machines, machines and equipment for cutting and shaping of solids, machines and equipment for spraying, tensioning machines, clamping preparations ...) shapes made of PUR foam, gauges, pliers, strap tensioners, upholstery hammer, nail clipper, needles, upholstery scissors, glue gun, buckles, hooks, thin iron wire.

#### **Study materials**

Navrátil, V.: ČALÚNENIE časť 3. Technická univerzita vo Zvolene. 1996

Hejnal, E.: Majster a bezpečnosť pri práci

Kressa, F.: Čalúnnické materiály pre 1.,2.a 3.ročník SOU učebný odbor čalúnník

Drápela J. – Prokopová H.: Čalúnnická technológia pre 1.a 2. ročník SOU učebný odbor čalúnník. Alfa Bratislava 1984

Prokopová H. – Drápela J.: Čalúnnická technológia pre 3.ročník SOU učebný odbor čalúnník. Alfa Bratislava 1985

### **C. Project of the educational program - modular - elaboration of module**

#### **Name and address of the applicant**

Newport Group, a.s., Lazaretská 23, 81109 Bratislava

#### **1. Name of the educational program**

Car upholsterer

#### **Module name**

Preparation and processing of upholstery materials

#### **2. Organizational form of education**

Presence

#### **3. Target group**

Persons interested in acquiring professional knowledge and practical skills for the performance of car upholsterer

#### **4. Required entrance education:**

at least completed primary school

#### **5. Graduate profile**

The graduate of the module acquires knowledge of the tools, machines and equipment used in the upholstery production. He is able to carry out basic work operations in the manual and machine processing of upholstery materials, to make basic upholstery designs and to realize basic upholstery work.

#### **6. Methods**

Lecture

Practical demonstrations

Professional practice

**7. Range of module** 162,00 hours

## **8. Teaching schedule**

### **Expert guarantor**

Ing. Lubomír Jakubík

### **The name of the**

### **professional topic**

### **Number of hours**

### **Theory**

### **Practice**

### **Lecturers**

Tools, gauges and  
auxiliary equipment

10

4

6

Jakubík L., Jozeková I.

Machines and  
equipment used in  
upholstery production

60

20

40

Jakubík L., Jozeková I.

Basic upholstery work

46

8

38

Jakubík L., Jozeková I.

Basic structures of  
upholstery

46

8

38

Jakubík L., Jozeková I.

**Total** 162

## **9. Module teaching scheme**

### **Tools, gauges and auxiliary equipment**

Types and function of upholstery tools

Types and function of upholstery tools and auxiliary devices

### **PROFESSIONAL PRACTICE**

Occupational Health and Safety and Fire protection

Classification of upholstery tools, utensils and gauges

Treatment, maintenance and storage of tools, utensils and aids

### **Machines and equipment used in upholstery production**

Electrical machines and equipments

- classification and characterization of electrical machines
- requirements for electrical machines and equipments
- safety regulations at work
- fire regulations for handling electrical equipment

Transport machines and equipments

- conveyors
- non-track and rail in-house transport
- forklifts and lifting platforms

Equipment for pulping materials

- pulping machines
- machines for crushing and cutting waste of foam materials

#### Cutting machines and equipments

- surveillance devices for textile materials
- machines for textile lamination
- mechanism of marking the shape of cuts
- cutting machines - classification and characteristics
- disc shearing machines
- vertical shearing machines
- belt cutting machine
- automatic cutting machines

#### Punching machines and equipments

- punching machines for coating materials
- punching machines for foam materials
- cardboard punching machines
- diagrams of working principles of punching machines

#### Portable hand-held electric and pneumatic machines, tools and equipment

- staplers
- drills and screwdrivers

#### Equipments for applying adhesives

- cylindrical adhesive application
- spray equipment with accessories
- mechanical brushes

#### Sewing machines

- sewing machines with tie and chain stitch
- coil and non-coil sewing machines
- buttonhole sewing machines
- multi-needle and special sewing machines

#### Stitching a hemming machines

- stitching machines for buttons
- spot stitch machines
- stitching machines for covering
- hemming machines

#### Pull-on and coating machines

- belt pull-on on machines
- cylinder and rod pull-on on machines
- flat upholstery machines
- coating machines for inserting a piece

#### Machines and equipments for cutting and shaping foam

- hand cutting and shaping machines
- belt cutting machines
- forming machines with resistance wire
- shaping machines with circulating oscillating string

#### Machines and equipments for foam application

- machines and equipments for application of hard foam
- machines and equipments for application of soft foam

#### Welding equipments

- welding equipments - classification and characteristics
- welding equipments for coating materials

#### Special upholstery machines and equipments

- machines for buttons beading, tensioning machines
- special clamping tools

## PROFESSIONAL PRACTICE

Occupational Health and Safety and Fire protection

Basic operations on various types of upholstery machines and equipments

Maintenance of upholstery machines and equipments

### Basic upholstery works

Manual sewing of textiles

Pinning

Types of hand seams (stitches)

Fastening of woven belts (top, inner, bottom)

Strapping - making a strap of rubber straps

Spike

Adjustment and fixing of springs

Main and secondary coupling of thrust springs

Fastening the edge wire

Cutting and fastening of technical fabrics

Processing of shaping materials

Processing of lightening materials

Covering by furniture fabric and leatherette

- Covering the seat and backrests with furniture fabric
- Covering armrests and backrests with furniture fabric
- Covering of free pillows
- Leatherette covering - low and high upholstery

Stapling with a pneumatic stapler

- Stapling the fabric without a tuck and with tuck
- Stapling leather and leatherette
- Stapling of technical textiles

Processing of rubber and foam materials

Forming of foam materials

Gluing of foam materials

Machine stitching of textiles

- Back seam
- Lapping seam
- Hem seam
- Sealing seam

## PROFESSIONAL PRACTICE

Occupational Health and Safety and Fire protection

Selection of a hand seam, needle and thread for manual sewing of textiles, textile pins, hand-sewing fabrics.

Fastening of woven straps - upper, inner, bottom using nails - spike.

Crossing of the belts simple, double and double.

Making a strap of rubber straps.

Selection, modification and fixing of springs.

Creating the main and secondary bonding of the springs by twine.

Fastening the edge wire.

Selection and cutting of the technical fabric using the scissors.

Processing of forming and lightening materials.

Covering of seats, backrests, armrests and backrests with furniture fabric and leatherette. Covering of free pillows.

Stapling the fabric without a tuck and with tuck, stapling of the technical textiles, leather and leatherette.

Processing of rubber and foam materials.

Machine stitching of textiles.



### **Basic structures of upholstery**

Upholstery without springs and edge

Upholstery without springs and with edge

Hollow upholstery

Upholstery with springs - upper

Upholstery with springs - inner and lower

Upholstery on the spring frame

### **PROFESSIONAL PRACTICE**

Upholstery without springs and edge

Upholstery without springs and with edge

Hollow upholstery

Making a strap of rubber straps.

Upholstery with springs - upper

Upholstery with springs - inner and lower

Upholstery on the spring frame

Písomná skúška - test

Written examination – test

Requested success 60%

Practical exam – working-out project assignment + presentation of the results of the project assignment (professional interview)

Requested success min. 70%.

## **11. Material and technical provision**

### **Areas**

The course takes place in modern training areas with audiovisual equipment. Training facilities include workshops whose professional equipment will enable participants in the learning program to acquire practical skills.

### **Technical equipment, teaching aids**

Presentation equipment: projector, screen; PC classroom equipment; magnetic board, flipchart + fixes, blocks and stationery for participants.

Work equipment and tools used in the performance of upholstery work: Materials used in the upholstery (supporting skeletons - wood, metal, plastic, combined, carrier subbases - flexible, solid, natural and synthetic forming materials, natural and synthetic lightening materials, jute fabrics, technical fabrics, meshes, textile and non-textile coating materials, connecting, auxiliary materials ...) machinery and equipment used in upholstery production -

(pulping machines, shearing machines and equipment, punching machines, adhesive applicators, sewing machines, stitching and hemming machines, drawing and coating machines, machines and equipment for cutting and shaping of solids, machines and equipment for spraying, tensioning machines, clamping preparations ...) shapes made of PUR foam, gauges, pliers, strap tensioners, upholstery hammer, nail clipper, needles, upholstery scissors, glue gun, buckles, hooks, thin iron wire.

### **Study materials**

Navrátil, V.: ČALÚNENIE časť 3. Technická univerzita vo Zvolene. 1996

Hejnal, E.: Majster a bezpečnosť pri práci

Kressa, F.: Čalúnnické materiály pre 1.,2.a 3.ročník SOU učebný odbor čalúnník

Drápela J. – Prokopová H.: Čalúnnická technológia pre 1.a 2. ročník SOU učebný odbor čalúnník. Alfa Bratislava 1984

## **C. Project of the educational program - modular - elaboration of module**

### **Name and address of the applicant**

Newport Group, a.s., Lazaretská 23, 81109 Bratislava

### **1. Name of the educational program**

Car upholsterer

#### **Module name**

Upholstery of car interiors

### **2. Organizational form of education**

Presence

### **3. Target group**

Persons interested in acquiring professional knowledge and practical skills for the performance of car upholsterer

### **4. Required entrance education:**

at least completed primary school

### **5. Graduate profile**

The graduate of the module acquires knowledge about technological processes of car interior. He is capable of making upholstery on car interiors - seats, backrests, side door panels, head restraints and armrests.

### **6. Methods**

Lecture

Practical demonstrations

Professional practice

### **7. Range of module** 98,00 hours

### **8. Teaching schedule**

#### **Expert guarantor**

Ing. Ľubomír Jakubík

#### **The name of the professional topic**

#### **Number of hours**

#### **Theory**

#### **Practice**

#### **Lecturers**

Upholstery of car seats

22

6

16

Jakubík Ľ., Jozeková I.

Upholstery of the backrests.	18	6	12	Jakubík L., Jozeková I.
Upholstery padding of the side parts of the door	21	6	15	Jakubík L., Jozeková I.
Upholstery of ceilings, head rests and arm rests	21	6	15	Jakubík L., Jozeková I.
Modern elements of car interiors	16	6	10	Jakubík L., Jozeková I.
<b>Total</b>	<b>98</b>			

## 9. Module teaching scheme

### Upholstery of car seats

Methods of creating anatomically shaped seat using PUR foam shapes

Methods of bonding shapes made of PUR foam to the metal frame of the seat

Measurement, marking and sewing of the seat cushion

Production covers for seat upholstery

Fastening the cover to the underside of the seat

PROFESSIONAL PRACTICE

Occupational Health and Safety and Fire protection

Creating the anatomical shape of the seat and backrest using PUR foam shapes. Selection of glue and bonding of PUR foam shapes to the metal frame of the seat and backrest. Measurement, marking and sewing of the seat and backrest cover.

Production covers for seat upholstery. Fastening the cover to the bottom of the seat and backrest.

### Upholstery of the backrests

Methods of creating anatomical shape of the backrest using PUR foam shapes

Methods of bonding PUR foam shapes to the metal backrest skeleton

Measurement, marking and sewing of the backrest

Production covers for backrest upholstery

Fixing the cover to the underside of the backrest

PROFESSIONAL PRACTICE

Occupational Health and Safety and Fire protection

Creating the anatomical shape of the seat and backrest using PUR foam shapes. Selection of glue and bonding of PUR foam shapes to the metal frame of the seat and backrest. Measurement, marking and sewing of the seat and backrest cover.

Production covers for seat upholstery. Fastening the cover to the bottom of the seat and backrest.

### Upholstery padding of the side parts of the door

Removing the filler of side parts of the door.

Cutting the cover material according to the shape of the filler

Coating and fastening of the padding the side parts of the door by gluing

Installation of upholstery of door side panels

PROFESSIONAL PRACTICE

Occupational Health and Safety and Fire protection

Removing the filler of side parts of the door. Cutting the cover material according to the shape of the filler.

Coating and fastening of the padding of the side parts of the door by gluing. Installation of upholstery of door side panels.

**Upholstery of ceilings, head rests and arm rests**

Measurement and sewing of the cover on the ceiling

Fixing the cover to the ceiling

Methods of creating anatomical shape of head and arm rests using PUR foam shapes

Measurement and sewing of head and arm rests

Fixing made cover to the underside of the head rest and the arm rest

**PROFESSIONAL PRACTICE**

Occupational Health and Safety and Fire protection

Measurement and sewing of the cover on the ceiling. Creating anatomical shape of head and arm rests using PUR foam shapes.

Fixing made cover to the underside of the head rest and the arm rest.

**Modern elements of car interiors**

Installation and types of airbags (front, side, window)

Types and location of sensors integrated in the upholstery

Mounting seat heating (heaters, cable bundles, fuses of system, thermostat)

Upholstery and heating of the steering wheel

Comfort elements CMV integrated in upholstery

**PROFESSIONAL PRACTICE**

Occupational Health and Safety, Fire Protection, Personal Protection Elements, handling and storage

Airbag assembly - connecting the sensor with the electrical circuit to the next part, filling the nylon bag - from the reservoir pressure vessel or explosive reactions.

Installation of species sensor types and CMV comfort elements under upholstery.

Mounting seat heating - inserting heating elements under the upholstery, placing the cable bundles and system fuses in the invisible place of the vehicle, placing the thermostat.

Upholstery and heating of the steering wheel - measuring of the steering wheel (steering wheel diameter, handle circumference), marking, cutting, sewing of the steering wheel cover, installation of heating elements, tensioning of the steering wheel cover, sewing of the coat on the edges.

Písomná skúška - test

Written examination – test

Requested success 60%

Practical exam – working-out project assignment + presentation of the results of the project assignment (professional interview)

Requested success min. 70%.

**11. Material and technical provision****Areas**

The course takes place in modern training areas with audiovisual equipment. Training facilities include workshops whose professional equipment will enable participants in the learning program to acquire practical skills.

**Technical equipment, teaching aids**

Presentation equipment: projector, screen; PC classroom equipment; magnetic board, flipchart + fixes, blocks and stationery for participants.



Work equipment and tools used in the performance of upholstery work: Materials used in the upholstery (supporting skeletons - wood, metal, plastic, combined, carrier subbases - flexible, solid, natural and synthetic forming materials, natural and synthetic lightening materials, jute fabrics, technical fabrics, meshes, textile and non-textile coating materials, connecting, auxiliary materials ...) machinery and equipment used in upholstery production - (pulping machines, shearing machines and equipment, punching machines, adhesive applicators, sewing machines, stitching and hemming machines, drawing and coating machines, machines and equipment for cutting and shaping of solids, machines and equipment for spraying, tensioning machines, clamping preparations ...) shapes made of PUR foam, gauges, pliers, strap tensioners, upholstery hammer, nail clipper, needles, upholstery scissors, glue gun, buckles, hooks, thin iron wire.

#### **Study materials**

Navrátil, V.: ČALÚNENIE časť 3. Technická univerzita vo Zvolene. 1996

Hejnal, E.: Majster a bezpečnosť pri práci

Kressa, F.: Čalúnnické materiály pre 1.,2.a 3.ročník SOU učebný odbor čalúnnik

Drápela J. – Prokopová H.: Čalúnnická technológia pre 1.a 2. ročník SOU učebný odbor čalúnnik. Alfa Bratislava 1984

Prokopová H. – Drápela J.: Čalúnnická technológia pre 3.ročník SOU učebný odbor čalúnnik. Alfa Bratislava 1985