Final assessment

The following materials refer to the course MC&CT and are to be used for the purposes of final assessment.

Version 1

1. Name the basic types of milling cutters, field of application, common cutting tool materials for milling cutters.
2. The procedure of calculation of parameters for roughing turning.
3. Types of cutting tool failures.

Version 2

1. Enlist the main types of hole-machining tools and their field of application.
2. Codification of the grinding wheels. The procedure of grinding wheel selection.
3. Methods of cutting temperature analysis.

Version 3

1. Processes in the cutting area during the formation of the main types of chips. Single shear plane.
2. Methods for studying residual stress and work hardening of the machined surface.
3. The procedure of selection and calculation of milling parameters and power.

Version 4

1. Cutting patterns of threading with cutters.
2. Method of forming clearance angles for a threading die. Calculation of the radial relief value.

Version 5

1. Types of gear shaping cutters.
2. Types of broaches.

Version 6

1. Basic geometrical parameters of hobs.
2. Cutting tool materials: grades and properties.

Version 7

1. Chip breaking methods.
2. Types of indexable inserts and methods of clamping.

Version 8

1. Milling cutter nomenclature.
2. Super hard materials.

Version 9

1. Construction and geometry of face milling cutters.
2. Design of spline broaches.

Version 10

1. Types of pointed teeth of milling cutters.
2. Relieving of a milling cutter.

Version 11

1. Types of end mills.
2. Abrasives.

Version 12

1. Procedure of a form cutter calculation.
2. Drills for deep hole drilling.

Version 13

1. Types of machine reamers.
2. A set of hand reamers.

Version 14

1. Cutting tools for threading operations.
2. Basic geometrical parameters of a cutting tool.