UNIVERSIDAD TÉCNICA FEDERICO SANTA MARÍA

INGENIERIA DE EJECUCIÓN MECANICA DE PROCESOS Y MANTENIMIENTO INDUSTRIAL

Sigla Asignatura:	**INT000**	**Sigla Carrera:**	**IMPMI**	**Hr. Teóricas semana:**	**4**
Asignatura :	INGLES TECNICO			**Hr. Prácticas semana:**	
Requisito(s):				**Hr. Total semana:**	**4**
Créditos	**3**				

OBJETIVO(s) Al aprobar la asignatura, el alumno será capaz de:

1. Interpretar las ideas principales contenidas en textos, folletos, catálogos, manuales, instructivos, normas, etc. entendida como una comprensión de texto rápida y esencial.

CONTENIDOS:

1. Bench tools.

- Wrenches.
- Hand tools: screwdrivers, hammers, punches, chisels, hand reamers, hand hacksaws, etc.
- Taps and threading dies.
- Layout tools: surface plate, angle plate, V blocks, parallels, combination set, etc.
- The bench vise.

2. Measuring tools.

- Line measurement: steel rules, depth gages, dividers, inside and outside calipers, etc.
- Fixed gages: surface plates, steel squares, feeler gage, wire and drill gages, radius gages, etc.
- Angular measurement: angle gages, protractors, center gage.
- Micrometers and verniers: inside and outside micrometers, depth micrometers.
- Vernier calipers: vernier height gage, vernier depth gage, vernier protractor, telescoping and small hole gages.

3. Drill press. Drill Press Work. Tipos de líneas usadas en dibujo.

- Layout work.
- Description of drill press and accessories.
- Holding devices for drill press.
- Twist drills.
- Counterbore and countersinks.
- Reaming.

4. Lathe. Running a lathe.

- Machine parts.
- Accessories: chucks, driving plates, draw in-collet attachment, taper attachment, steady rest, etc.
- Holding devices: lathe dogs, collets, mandrels, angle plates, etc.
- Thechnical data.
- Straight turning.
- Turning between centers.
- Knurling and boring.

5. Cutting tools.

- Tool bits and boring tools.
- Tool holders and boring bars.
- Cutting-off tools.
- Drills and center drills.
- Threads and thread cutting.
- Reamers.

6. Measuring Tools.

- Micrometers: Screw thread, paper gage, heads for, inside type, etc.
- Center gages.
- Screw pitch gages.
- Dial indicators.
- Dial bore gages.
- Gage block sets.

- Optical flats.
- Granite surface plates.
- Measuring rods.
- Plug gages and ring gages

7. Materials and Its Properties.

- Ferrous metals: Iron and Steel, Plain Carbon and Low Alloy Steels.
- Non-Ferrous metals: Aluminum and Aluminum Alloys, Cooper and Cooper Alloys, Brass, Bronze, Magnesium, Tin, Titanium, Zinc, Die Cast Metals.
- Shop tests for identifying steels: Visual observation, Magnet Test, Hardness Test, Scratch Test, File Test, Chemical Test, Spark Testing, Machinability Test.

8. Blue Print Reading.

- Lines.
- Views.
- Dimensions and notes.
- Sections.
- Shop sketching.

EVALUACIÓN:

- 4 controles parciales como mínimo, con igual ponderación.
- Evaluación final, promedio aritmético de las notas parciales.

BIBLIOGRAFÍA:

1. Department of Education IBM Corporation. Shop Terms
2. Delmar Publishers Inc. Drill Presswork
3. Delmar Publishers Inc. Bench Work
4. **FREDERIC SWING CRISPIN**. Dictionary of Technical Terms
5. **C.A. FELKER**. Shop Mathematics.
6. **JOHN R. PHELPS**. Practical Shop Mathematics.
7. **CATALOGS:** Starrett, Mitutoyo, Brown and Sharpe, Scherr Tumico, Lufkin.