METIS: MicroElectronics Training, Industry and Skills

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METIS Partnership covers the microelectronics ecosystem; multiple stakeholders; and all education levels (from high school to professional courses).
## METIS Partnership: a multi-stakeholder initiative

### Industry
- SEMI
- Bosch
- Infineon
- X-FAB
- Graphene
- Silicon Saxony
- Summa Semiconductor
- Arcelik

### Education
- imec.academy
- Dresden Chip Academy
- Tech Uni Graz
- Tech Uni Sofia
- Tech Uni Budapest
- IAL
- FIT
- Uni of SE Norway

### Strategy & Consulting
- DECISION

### Civil Society
- European Association of Women in Tech
- European Association of Career Guidance in STE(A)M

### Public
- CIMEA (Certification Body)
METIS key goals

Establish an EU Microelectronics Observatory & monitor key trends (technical, social, political…) and their impact on businesses’ skills needs

Provide education institutions with industry feedback on the needs of next generation microelectronics training

Innovative Learning: Develop innovative curriculum & mechanisms of delivery (blended education: modular, work-based + online learning)

Embed sustainability & social responsibility policy principles at work

Support cross-border labour / student mobility in Europe
## METIS KPIs

<table>
<thead>
<tr>
<th>#</th>
<th>KPI</th>
<th>Quantification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skills Strategy</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Best practices of training</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Monitoring Methodology</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Yearly Monitoring Reports</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Occupational Profiles</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>METIS Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Training Modules</td>
<td>43</td>
</tr>
<tr>
<td>8</td>
<td>Learners involved in validation</td>
<td>900</td>
</tr>
<tr>
<td>9</td>
<td>MoU signed for recognition/certification</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Learners using the Open Education Platform</td>
<td>2,000</td>
</tr>
<tr>
<td>11</td>
<td>Education providers adapting METIS curriculum</td>
<td>200</td>
</tr>
<tr>
<td>12</td>
<td>Long Term Action Plan</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Microelectronics Observatory &amp; Skills Council</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Stakeholders participating in Observatory &amp; Skills Council</td>
<td>150</td>
</tr>
</tbody>
</table>
METIS: focused on key technologies & skills development

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Teaching Hours</th>
<th># of Modules</th>
<th>EQF levels (4: technician – 7:engineer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Component Design</td>
<td>300</td>
<td>10</td>
<td>4 to 6</td>
</tr>
<tr>
<td>2. System Design</td>
<td>400</td>
<td>13</td>
<td>4 to 6</td>
</tr>
<tr>
<td>3. Basics of manufacturing</td>
<td>300</td>
<td>10</td>
<td>4 to 6</td>
</tr>
<tr>
<td>4. Key Competences &amp; Innovative Thinking</td>
<td>100</td>
<td>10</td>
<td>5 to 7</td>
</tr>
</tbody>
</table>
METIS approach: Modular & Innovative

- METIS Module and Units & Curriculum’s Structure
METIS Governance

**Education & Training**
- Skills Catalogue
- Occupational Profiles
- Training content
- Mobility mechanisms
- Placement

**Policy Formulation**
- Strategic vision for the sector
- Identification of priority areas
- Input to evidence-based policy making
- Opinion papers
- Evidence filtering and amplification

Provides tools and solutions to VET Systems & informs policy making

**SKILLS COUNCIL**
Technical consultations, scenario setting and input provision

**ASSEMBLY**
Composed of stakeholders oversees and steers the Observatory and Skills Council

**OBSERVATORY**
Monitoring, foresight and strategy setting

**SECRETARIAT**
Management, coordination, operational continuity and financial sustainability
Branding:
METIS: **Micro**Electronics **T**raining, **I**ndustry and **S**kills

METIS embodies strong European values and representation: the logo represents the European Flag stylised as a microprocessor component, with the stars as elements of the circuitry.

METIS was inspired by Greek Mythology: **Metis** was the **goddess of wisdom, prudence and deep thought, good counsel and cunning**. The Acronym reflects the ambition of the proposal that aims at becoming the source of:

- “wisdom” for the employees – current and prospective – of the microelectronics sector through the innovative METIS curriculum and training tools;
- “good counsel” for the policy makers, by informing the evidence-based policy formulation through the Skills Strategy, the Long-Term Action Plan and the Observatory & Skills Council;
- “cunning” for the industry to regain and maintain global leadership in this critical sector.
Thank you! Questions?
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