Mälardalens Tekniska Gymnasium

Kent Conradson Chairman of the Board
Susann Jungåker CEO/Principal
Upper secondary education that provides dual competence in collaboration with industry
### Mälardalens Tekniska Gymnasium

| Volume          | 72 new students each year  
|                 | Total 216 students, 72 students in 1\textsuperscript{st}, 2\textsuperscript{nd} and 3\textsuperscript{rd} grade each |
| Education       | 3-year upper secondary education  
|                 | IN - Industrial Technology Program (vocational program)  
|                 | TE - Technology Program (theoretical program as preparation for studies at university) |
| Delivery        | Scania 80% and AstraZeneca 20% (based on ownership)  
|                 | A total of 500 students have graduated since 2015  
|                 | > 90% have been employed at Scania or AstraZeneca immediately after graduation  
|                 | > 70% are permanent employees at Scania or AstraZeneca |
Both theoretical and vocational industrial technology program.
Comparision between MTG and general industrial and technical education in Sweden

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
<th>Theory Courses</th>
<th>Vocational Courses</th>
<th>MTG Technical Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrially</strong></td>
<td>2500</td>
<td>15 weeks</td>
<td>650 credits</td>
<td>1500 credits</td>
</tr>
<tr>
<td><strong>Technical</strong></td>
<td>4000</td>
<td>100 credits</td>
<td>1 100 credits</td>
<td>1 200 credits</td>
</tr>
<tr>
<td><strong>Vocational</strong></td>
<td>1 400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internship</strong></td>
<td>30 weeks</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- MTG Technical Education: 3 years
- General Industrial and Technical Education: 3 years
TECHNICAL EDUCATION THAT PROVIDES DOUBLE ELIGIBILITY

- Education in practice
- Two programs TE and IN 3 years 4 000 credits
- Workshop weeks 07.15 – 16.00
  Theoretical weeks 08.00 – 15.50
- 20 – 30 weeks vocational internship and 12 weeks paid job for the summer
- Broad technical education including specialization
- Graduational project based on actual assignment from the industry
Education that provides double eligibility

Professional skills and qualification for higher education, 4 000 credits

Year 1
Technical training basic level
Theory 450 c
Technical theory 450 c
Vocational courses 500 c
Internships 3 weeks

Summer internships
4 weeks

Year 2
Technical training Level 2
Theory 400 – 650 c
Technical theory 250 – 350 c
Vocational courses 500 c
Internships 6 weeks

Summer internships
8 weeks

Year 3
Technical training specialization
Production and machining technology
Maintenance technology automation
Maintenance technology mechanics
Design and production development
Welding
Internships 10 – 20 weeks

Employment
6 months
20 students
24 students
26 students
2 students
Graduation
Employability with double competence

- Employment directly after graduation
- Attractive professional qualifications
- Eligibility for higher education
- Employable with workplace experience
SCANIA ASTEGET

Training platform with validation and certification for required skills
## Training and skills development for employees

<table>
<thead>
<tr>
<th>Uppdragsutbildning</th>
<th>Beskrivning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaniasteget Machine operator</td>
<td>Four modules containing seven training weeks at MTG and four weeks of practice in the workshop. Basic operator knowledge, computer-controlled production (CNC) and robotics.</td>
</tr>
<tr>
<td>Scaniasteget Foundry operator</td>
<td>Four modules containing five weeks training at MTG and four weeks of practice in the workshop. Electrical engineering and mechatronics, maintenance, robotics, process, operation and troubleshooting.</td>
</tr>
<tr>
<td>Scaniasteget VCB-specialist</td>
<td>Four modules containing four training weeks at MTG and four weeks of practice in the factory. Mathematics, electrical engineering, electric power, electricity grid, electrical components, power sources and measurement technology.</td>
</tr>
<tr>
<td>Scaniasteget Maintenance technicians</td>
<td>Five modules containing five weeks training at MTG and four weeks of practice in the workshop. Maintenance, mechatronics, robotics, practical electrical engineering and automation.</td>
</tr>
<tr>
<td>Scanias Technician training</td>
<td>Two-year education (as well as one year of mathematics if necessary). Production philosophy, computer science, technology, communication, technical English, PEIP, project work.</td>
</tr>
<tr>
<td>Production engineering specialization courses</td>
<td>Three – five days training at MTG in robotics, welding, cutting machining, electrical safety, etc.</td>
</tr>
</tbody>
</table>
Diploma and certification

After completing and passing training and tests, participants receive certificates according to industry standards as well as diplomas where work experience from internships is described.