

### Module Description

<b>Module name</b>	Science and Technology Insights
<b>Module level, if applicable</b>	Bachelor of Physics
<b>Code, if applicable</b>	008U0032
<b>Subtitle, if applicable</b>	-
<b>Course, if applicable</b>	-
<b>Semester(s) in which the module is taught</b>	1 <sup>st</sup>
<b>Person responsible for the module</b>	Dr. Syaharuddin Kasim, S.Si, M.Si.
<b>Lecturer</b>	Dr. Syaharuddin Kasim, S.Si, M.Si.
<b>Language</b>	Indonesian Language [Bahasa Indonesia]
<b>Relation to Curriculum</b>	Undergraduate degree program, mandatory, 1 <sup>st</sup> semester
<b>Type of teaching, contact hours</b>	<p><b>Teaching methods</b> : [group discussion], [problem-based learning].</p> <p><b>Teaching forms</b> : [lecture]</p> <p><b>Schedule</b> : Monday, 16.20 - 17.50</p>
<b>Workload</b>	<p>For this course, students are required to meet a minimum of 90.67 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> <li>- 26.67 hours for lecture,</li> <li>- 32.00 hours for structured assignments,</li> <li>- 32.00 hours for private study</li> </ul>
<b>Credit points</b>	2 credit points (equivalent with 3.4 ECTS)
<b>Requirements according to the examination</b>	A student must have attended at least 80% of the lectures to sit on the final examination.

<b>regulations</b>	
<b>Mandatory prerequisites</b>	-
<b>Module objectives/intended learning outcomes</b>	<p>After completing the course, Students are able:</p> <p><b>Intended Learning Outcomes (ILO):</b></p> <p><b>ILO 8 :</b> Students are able to develop their skill and maintain a network with colleagues. [ILO 8] - So</p> <p><b>ILO 9 :</b> Students are able to demonstrate a social awareness, respects to diversity of religion, ethnicities, and cultures. [ILO 9] - So</p> <p><b>Course Learning Objective (CLO):</b></p> <p>After attending the Science and Technology Insights for one semester, students are able to describe and formulate problems related to the substance of Science, Technology, and Arts in accordance with the Vision and Mission of Hasanuddin University based on ethical values and character in an integrated manner, using an approach based on the Insight into Science, Technology and the Arts) and demonstrating or presenting the right problems in choosing alternative actions in complex situations (wrong arguments and wrong facts) based on the science and technology code of ethics.</p> <p><b>Sub CLO :</b></p> <p>ILO 9 ⇒ CLO 1 : Students are able to explain the Hasanuddin University Vision and Mission based on integrated ethical and character values, using Science, Technology and Art Insight Principles).</p> <p>ILO 8 ⇒ CLO 2 : Students are able to explain, describe and formulate comprehensively the problems related to the substance of Science and Technology.</p> <p>ILO 8 ⇒ CLO 3 : Students are able to demonstrate the selection of alternative actions in complex situations (erroneous arguments and false facts) based on the science and technology code of ethics.</p>
<b>Content</b>	<p>Students will learn about :</p> <ol style="list-style-type: none"> <li>1. Introduction to Science and Technology Insights</li> <li>2. Humans and the Universe</li> <li>3. Science</li> <li>4. The Development of Science</li> <li>5. Technology</li> <li>6. The Relationship of Science and Technology</li> <li>7. The Development of Technology</li> </ol>

	<p>8. The Impact of the Development of Science and Technology in Various Fields</p> <p>9. Art and Magnificence</p> <p>10. Integrity and Ethics</p>
<b>Forms of Assessment</b>	<p>Assessment techniques: [participation], [written test].</p> <p>Assessment forms: [assignment], [midterm exam], [final term exam].</p> <p>Assignment = 50%, Midterm exam = 25% Final term exam = 25%</p> <p>CLO 1 =&gt; ILO 9: 50% (Assignment: participation)</p> <p>CLO 2 =&gt; ILO 8: 25% (Midterm Exam: written test)</p> <p>CLO 3 =&gt; ILO 8: 25% (Final Term Exam: written test)</p>
<b>Study and examination requirements and forms of examination</b>	<p><b>Study and examination requirements:</b></p> <ul style="list-style-type: none"> <li>- Students must attend 15 minutes before the class starts.</li> <li>- Students must switch off all electronic devices.</li> <li>- Students must inform the lecturer if they will not attend the class due to sickness, etc.</li> <li>- Students must submit all class assignments before the deadline.</li> <li>- Students must attend the exam to get final grade.</li> </ul> <p><b>Form of examination:</b></p> <p>Written exam: Essay</p>
<b>Media employed</b>	Video conference, slide presentation, Learning Management System (SIKOLA)
<b>Reading list</b>	<p><b>Main :</b></p> <ul style="list-style-type: none"> <li>● Kasim, S. 2017. Filosofi Wawasan Ipteks (Teaching Book of UNIVERSITAS HASANUDDIN). ISBN: 978-602-6332-12-7. Pustaka Pena Press. Makassar.</li> <li>● Unhas Science and Technology Insight Lecturer Team, 2013, Science and Technology Insights textbook of Head of Study Program, 6<sup>th</sup> Edition, UNIVERSITAS HASANUDDIN, Makassar.</li> <li>● Usman, H., et al. 2014. Textbook of Science and Technology Insights (Using a Learning Approach). Head of Study Program</li> </ul>

of UNIVERSITAS HASANUDDIN. ISBN: 978-602-99757-8-9.  
Offset CV. Gelora Printing. Makassar.

**Support :**

- Dadang Ahmad S., 2009. Head of Study Program Workshop Materials for Science and Technology Insights UNIVERSITAS HASANUDDIN (Combined Science and Technology Learning Materials), Makassar.
- Kartono, H. 2003. Pencemaran Lingkungan. Director-General of Higher Education, Ministry of National Education, Jakarta.
- Kosela, S. 2003. Ilmu Pengetahuan dan Teknologi bagi Kehidupan Manusia. Director-General of Higher Education, Ministry of National Education, Jakarta.
- Mappadjantji Amien, 2009. Science and Technology Insights (Philosophy and Conceptual Framework), Head of Study Program Workshop Materials for Science and Technology Insights UNIVERSITAS HASANUDDIN, Makassar.
- Masnur Muchlis, 2011. Pendidikan Karakter, Menjawab Tantangan Krisis Multidimensial. PT. Bumi Aksara, Second Printing. Jakarta.
- Stock, Paul and Rob JF Burton, Journal of Sustainability, 2011. ISSN 2071-1050, 3, 1090-1113;doi:10.3390/su3081090.
- Suriasumantri, Jujun,. 2003. Filsafat Ilmu Sebuah Pengantar Populer. Pustaka Sinar Harapan, Jakarta, and other related literature.