

<b>Module code</b>	SC-1381		
<b>Module Title</b>	Computing Skills for Chemistry		
<b>Degree/Diploma</b>	Bachelor of Science (Chemistry)		
<b>Type of Module</b>	Major Option		
<b>Modular Credits</b>	2	<b>Total student Workload</b>	5 hours/week
		<b>Contact hours</b>	2 hours/week
<b>Prerequisite</b>	None		
<b>Anti-requisite</b>	None		
<b>Aims</b>			
The module is designed for students to use relevant software and online resources for effective communication and transmission of chemical information.			
<b>Learning Outcomes</b>			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	10%	- identify and recognise available computer programs and software that are relevant to chemistry and be able to use them	
Middle order :	10%	- apply these computer programs and software in addressing chemistry tasks and problems - collect, analyse and manage chemical information using these programs and software	
Higher order:	80%	- transform chemical information from one domain to another - create, design and visualise chemical information - interpret the results of analyses - produce reports for effective verbal, written and online communication - work independently and become an effective team player	
<b>Module Contents</b>			
In this module, students will be introduced to various software and applications that are useful to the practice of chemistry including:			
<ul style="list-style-type: none"> <li>- software for drawing chemical structures and laboratory setups</li> <li>- chemistry software and freeware</li> <li>- software for data collection</li> <li>- software for data analysis</li> <li>- software for data presentation</li> <li>- collection and management of chemical literature</li> <li>- online communication of chemical information</li> </ul>			
This module is designed to provide students with computer skills associated with drawing chemical structures and diagrams, data collection, analysis and presentation. This module is not software-specific due to dynamic and transient nature of available software.			
<b>Assessment</b>	Formative assessment	Computing exercises and feedback	
	Summative assessment	Coursework: 100% - 7 reports (50%) - 2 computer-based examinations (50%)	