

## AREA 6 : EDUCATIONAL RESOURCES

6.1 Physical Facilities								
Benchmarked Standards								
6.1.1	List the major physical facilities available to conduct educational programmes of the HEP							
No.	Description	Current		Projection				Relevant Parties
		No.	Capacity	Next Year		Next Two Years		
				No.	Capacity	No.	Capacity	
1.	Lecture Halls	57	60	93	60	141	835	PPPA
2.	Tutorial Rooms	31	30	36	30	36	30	PPPA
3.	Lecturer Room	600	1	760	1	1,049	1	
4.	Discussion Rooms	25	6-8	30	6-8	35	6-8	PPPA
5.	Laboratories and Workshops	83	30	103	30	163	30	PPPA
	• IT Lab							PPPA
	• Science Lab							PPPA
	• Engineering workshop							PPPA
	• Processing workshop							PPPA
	• Manufacturing workshop							PPPA
	• Studio							PPPA

	• Others	2	14	2	14	30	30	PPPA
	Other facilities: - Cyber Centre							
	Cyber Centre (Industrial Campus)	1	52					
	Cyber Centre ( Main Campus At FKE )	1	43					
	Cyber Centre (Kolej Kediaman Teratai)	1	33					PK
	Cyber Centre (Kolej Kediaman Bunga Raya)	1	31					
	Cyber Centre (Kolek Kediaman Murni)	1	35					
	Wireless Access Point	2	City					
		6	Campus					
		9	Industrial					
			Campus					PK
			Main					
			Campus					
	• Server Room	1	City					
			Campus					PK

		1	Industrial Campus					
		1	Main Campus					
5.	Library and Information Centers	1	5,000	1	8000	1	10,000	PPPA/PK
	Learning Support Centers	1	60	1	500	1	500	PPPA/PK
6.	Learning Resources Support	4	100-300	4	100-300	4	100-300	PPPA/PK
7.	Student Social Spaces	1	20	1	14 No's (20-30pax)	1	14 No's (20-30pax)	PPPA/PK
8.	Other facilities							
	- Auditorium	-	-	1	4000	1	4000	
	- Sport and Recreational Hall							
	• Sport Hall	1						
	• Stadium	1	500	1	500	1	500	
	• Hockey Field	1	2000	1	2000	1	2000	
	(Astroturf)			1		1		
	• Rugby field	1						
	- Center of Excellence (COE)	-		1		1		
	- Examination Hall		-	-	-	6	17,139m <sup>2</sup>	

		-		1	150	4	480	
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	Description	Action	Evidence	Relevant Parties
6.1.2	Describe the adequacy of the physical facilities and equipments (such as workshop, studio, laboratories) as well as human resources (for example, laboratory professionals, technicians).	<ol style="list-style-type: none"> <li>1. The laboratories and workshop are provided at the rate of 2-2.2 meter<sup>2</sup> per student as EPU guidelines.</li> <li>2. For laboratories with a capacity of 30 students, the ratio of work station to a student is about 1:1; this is due to the practice orientated approach to teaching and learning.</li> <li>3. Most of the laboratories are filled with necessary equipments required for the running of the labs. The ratio of equipment to a student is about 2:1.</li> <li>4. For the operations of the laboratories, every lab has one technician to run the labs especially for equipment</li> </ol>	<p>Appendix F1</p> <ul style="list-style-type: none"> <li>• General EPU Guidelines Editions 2008 22 m<sup>2</sup>/student to 27 m<sup>2</sup>/student.</li> <li>• General Requirements By Faculty Lecture Room- Capacity of 30 or 60 students. Lab- 30 Students.</li> </ul>	PPPA

		<p>preparation before lectures.</p> <p>Teaching Engineers are assigned to oversee the overall performance of the laboratories.</p> <p>5. Therefore for every 30 student's capacity laboratories, there a technician assigned to run the operations. Ratio 30 students' laboratory: 1 Technicians</p>	<p>Appendix F2</p> <ul style="list-style-type: none"> <li>• Letter of approval for scope from Economic Planning Unit , Prime Minister's Department.</li> </ul>	
6.1.3	Identify current unmet needs and needs that may arise within the next several years.	<p>1. Under the development budget, government allocations are given quarterly based on five years planning. All faculties to meet the teaching and learning requirement are to plan facilities based on student projection in five years from 2010 till 2015. (RMK-10). In the Tenth Malaysia Plan all unmet needs and projected needs are identified and seek direct expenditure. (PPA)</p>		PPPA/PK

		<p>2. Execution of ICT projects either preplanned or ad hoc for the years to come depends on the budget allocated for ICT Development for Universiti Teknikal Malaysia Melaka in RMK10. Following is the ICT's undertaking which have been planned from 2010 till 2014.</p>	No	Project Name	
			1.	Teaching System (E-Learning)	
			2.	Voice Communication System (VOIP)	
			3.	Document Management System (OAS)	
			4.	Business Continuity and Disaster Recovery Planning	
			5.	Provision of ICT Infrastructure for CCTV & Security System	
			6.	Video Conferencing System	
			7.	Lecture Hall Electronic Equipment	
			8.	Provision of ICT Infrastructure for PA System	
			9.	Electronic Bulletin Boards & Info Kiosks	
			10.	Integrated Building Management System	
			11.	Main Campus Network System &	

			Data Center – New Hardware 12. Internet Access for Main Campus 13. Wireless Equipment for Main Campus /Hot Spot Area 14. Database – New Hardware																																																													
6.1.4	For programmes requiring workshop or laboratory support, provide a brief description of the facilities.	Example: Fabrication Lab, Faculty of Mechanical Engineering <table border="1"> <tr><td>NO</td><td></td></tr> <tr><td>1</td><td>Laser Cutting Machine</td></tr> <tr><td>2</td><td>Rolling Machine</td></tr> <tr><td>3</td><td>Press Machine 100Tone</td></tr> <tr><td>4</td><td>Press Machine 150Tone</td></tr> <tr><td>5</td><td>Profile Bending Machine</td></tr> <tr><td></td><td></td></tr> <tr><td>7</td><td>Multipurpose Welding Machine</td></tr> <tr><td>8</td><td>Oxygen Cutting With Stencil Machine</td></tr> <tr><td>9</td><td>BOMAR Power Saw Machine</td></tr> <tr><td>10</td><td>Fume System</td></tr> <tr><td>11</td><td>Pedestal Grinding Machine</td></tr> <tr><td>12</td><td>Bevelling Cutting Machine</td></tr> <tr><td></td><td></td></tr> <tr><td>14</td><td>Shearing Cutter</td></tr> <tr><td>15</td><td>Manual Bending</td></tr> <tr><td>16</td><td>Magnetic Bending Machine</td></tr> <tr><td>17</td><td>Rack</td></tr> <tr><td>18</td><td>Technician Table</td></tr> <tr><td>19</td><td>Magnetic Core Drilling Machine</td></tr> <tr><td>20</td><td>Press Brake Machine</td></tr> <tr><td>21</td><td>Welding Inspector Tool Kit</td></tr> <tr><td>22</td><td>Work Table</td></tr> <tr><td>23</td><td>Swage Block</td></tr> <tr><td>24</td><td>Anvil 50KG</td></tr> <tr><td>25</td><td>Master Mechanical Service</td></tr> <tr><td>26</td><td>Centilever Toolbox</td></tr> <tr><td>27</td><td>Steel Cabinet</td></tr> <tr><td>28</td><td>Roller Cabinet</td></tr> <tr><td>29</td><td>Wise</td></tr> </table>	NO		1	Laser Cutting Machine	2	Rolling Machine	3	Press Machine 100Tone	4	Press Machine 150Tone	5	Profile Bending Machine			7	Multipurpose Welding Machine	8	Oxygen Cutting With Stencil Machine	9	BOMAR Power Saw Machine	10	Fume System	11	Pedestal Grinding Machine	12	Bevelling Cutting Machine			14	Shearing Cutter	15	Manual Bending	16	Magnetic Bending Machine	17	Rack	18	Technician Table	19	Magnetic Core Drilling Machine	20	Press Brake Machine	21	Welding Inspector Tool Kit	22	Work Table	23	Swage Block	24	Anvil 50KG	25	Master Mechanical Service	26	Centilever Toolbox	27	Steel Cabinet	28	Roller Cabinet	29	Wise	Appendix F3 <ul style="list-style-type: none"> <li>• Labarotry Location at Five Faculty.</li> </ul>	PPPA
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6.1.5	Show how educational resources are distributed and scheduled according to	All proposals to be presented and discussed at the Development Committee comprising of Vice Chancellor	Appendix F4 <ul style="list-style-type: none"> <li>• Process and Procedure Of Approval.</li> </ul>	PPPA																																																												

	educational needs.	as the Chairman, the two deputy vice chancellor, Registrar, Bursar, Director of Development, Director of ICT and Deans of Faculties. The committee will decide on the proposal scope of works approval and the ceiling cost.		
6.1.6	Show evidence that the physical facilities comply with the relevant laws, and with health and safety regulations	<ol style="list-style-type: none"> <li>1 Handing over <ol style="list-style-type: none"> <li>a. Certificate of Practical Completion (CPC)- Approval Plan by MPAG</li> <li>b. Certificate of Fitness for Occupation (CFO)</li> <li>c. JKKP Lift approval</li> <li>d. Manuals for Air-conditioned equipment.</li> </ol> </li> <li>2 Fire Department (Bomba) Certification</li> <li>3 Health and Safety Compliance</li> </ol>	Appendix F5 <ul style="list-style-type: none"> <li>• Handing over.</li> <li>• Fire Department.</li> <li>• Health and Safety Compliance.</li> </ul>	PPA/PK
6.1.8	State the number of staff in the library and resource centre and their qualifications.	Interview and recruit staff that have an experience and qualification (academic) in library field.	Appendix F6 <ul style="list-style-type: none"> <li>• Number of library staff and their qualifications.</li> </ul>	PRSTKAAN



6.1.9	<p>Describe resource sharing and access mechanisms that are available to extend the library's capabilities. Comment on the extent of use of these facilities by academic staff and students. Comment on the adequacy of the library to support the programmes.</p>	<p>Resource Sharing and Access Mechanism to extend libraries capabilities:-</p> <p>Resource sharing does not merely mean mutual sharing of information sources among libraries. It will mean utilizing information resources of one library for generating services of another library. Resource sharing may mean sharing of all these resources for the mutual benefit of libraries and their users.</p> <p>A. ONLINE DATABASES</p> <p>Online databases are subscribed to support the development of learning and research.</p> <p>Local Database</p> <ol style="list-style-type: none"> <li>1. Bernama Library &amp; Infolink Services (BLIS)</li> <li>2. LawNet</li> <li>3. Malaysian Standards (MS) Online</li> </ol>	<p>Appendix F7</p> <ul style="list-style-type: none"> <li>• Linking to local and external online databases on library website at</li> </ul>	PRSTKAAN
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	<p>System</p> <ol style="list-style-type: none"> <li>4. Malaysian Theses Online (MYTO)</li> <li>5. Malaysian Union List of Serials (MyULIS)</li> <li>6. Malaysian Universities Repository Collection (MURC)</li> <li>7. MASTIClink</li> <li>8. NSTP e-Media</li> <li>9. Sirimlink</li> </ol> <p>External Databases</p> <ol style="list-style-type: none"> <li>1. ACM Digital Library</li> <li>2. ASME Online Journals</li> <li>3. British Standard Online (BSOL)</li> <li>4. Ebrary Academic Complete</li> <li>5. Emerald Management Xtra</li> <li>6. Engineering Village 2</li> <li>7. ENGnetBASE</li> <li>8. H.W. Wilson Applied Science &amp; Technology Full Text (Database)</li> <li>9. H.W. Wilson General Science Abstract</li> </ol>	<p><a href="http://library.utm.edu.my/index.php?option=com_weblinks&amp;catid=69&amp;Itemid=74">http://library.utm.edu.my/index.php?option=com_weblinks&amp;catid=69&amp;Itemid=74</a></p>	
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		<p>Full Text (Database)</p> <p>10.IEEE Xplore</p> <p>11.IOP Science</p> <p>12.Knovel Essentials</p> <p>13.McGraw-Hills Digital Engineering Library (DEL)</p> <p>14.ProQuest Dissertation &amp; Theses</p> <p>15.ScienceDirect</p> <p>16.Scopus</p> <p>17.Society for Industry and Applied Mathematics (SIAM)</p> <p><b>B. ONLINE RENEWAL ITEM</b></p> <p>Renewal item through online is one of the services provided by UTeM Library as well as renewal process at the Circulation Counter. This service can make user more easier renewal from online that also is more flexible and secure. Users can use this service directly from outside or inside campus through internet network. Online</p>	<p>Appendix F8</p> <ul style="list-style-type: none"> <li>• Online renewal item through WebOPAC on library website at <a href="http://library.utem.edu.my:8000/equip/custom/home.jsp">http://library.utem.edu.my:8000/equip/custom/home.jsp</a></li> </ul>	
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		<p>renewal service can be made if and only the items are not being reserved by other users; the items not over the due date and no have fines.</p> <p>Importance of this service This service being exists as a concern of UTeM Library for their users because they can make renewal process without attend to library counter. UTeM Library is in their way to optimize the electronic facilities to utilize all the users as well as emphasizing continuous improvement.</p> <p>C. ONLINE RESERVATION ITEM Reservation items through online is one of the services provided by UTeM Library. This services is one of the library procedure to make sure all the users have same chance to borrow the items which is still in on loan status. Users who</p>	<p>Appendix F9</p> <ul style="list-style-type: none"> <li>• UTeM(ISO)/PS/PK35</li> </ul>	
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		<p>made the reservations are able to get their reserved items once; the borrower returned the items. System will notify to library staff that the item is being reserved by second user once the returning process is done by the first users at the Circulation Counter. The status of the items can be viewed by users through library portal by clicking WebOPAC sub menu. This services only can be made if the items still in on loan status.</p> <p>Importance of this service</p> <p>This service provided by library to practice all the electronic facilities. UTeM as an university will deliver an excellent professional in industrial field.</p> <p>D. OPAC Online Public Access Catalogue, also</p>		
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		<p>known as OPAC, is an online search engine that allows members of the public to search through Internet at any time and place for library materials from a comprehensive database of bibliographic records called the Union Catalogue, contributed by various participating libraries.</p> <p>OPAC allows searching of library materials by various access points such as author, title, subject, ISBN, ISSN, publisher, year published, media type and keyword. Users may narrow down their searches to specific library collection too. OPAC also allows users to browse for library collection by author, subject and publisher, which links to the work for these areas. Besides showing the availability of particular library material at various libraries, OPAC also</p>	<p>Appendix F10</p> <ul style="list-style-type: none"><li>• UTeM library WebOPAC at <a href="http://library.utem.edu.my:8000/elmu/index.jsp?module=webopac-d&amp;action=webopac.jsp">http://library.utem.edu.my:8000/elmu/index.jsp?module=webopac-d&amp;action=webopac.jsp</a></li></ul>	
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		<p>allows registered members to place online reservations if material is not available in list for check out.</p> <p>Comment on the extend of use of these facilities by academic staff and students.</p> <p>A. By User categories :- Based on the survey result, it can concluded that people who's attending to the library are student which representing 72% of correspondent. Academic staff is 25% and only 3% represent non academic staff. The reason why student are the mostly group that go to the library because they are discussing or searching for materials for their studies. Academic staff representing 25% because they are instructor that using library for their research and teaching methods. While non academic is 3%</p>	<p>Appendix F11</p> <ul style="list-style-type: none"> <li>• Questionnaires form.</li> </ul> <p>Appendix F12</p> <ul style="list-style-type: none"> <li>• Questionnaires Feedback.</li> </ul>	
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		<p>because they visited the library for only general purpose.</p> <p>B. By user satisfactory :- The majority of the respondents choose to answer Need for improvement that representing 48%. These correspondents are the group that really understands the use of the library. 47% users choose to answer satisfied for library services and facilities. This group may the one that always go and used all the facilities in library. Only 3% correspondent choose not satisfied with libraries services. This maybe because lack of understanding and the important of library for academic purpose. 2% user those are very satisfied to libraries facilities and services representing.</p>		
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		<p>Comment on the adequacy of the library to support the programmes.</p> <p>Based on survey it was concluded that, 50% users choose to answer satisfied for library services and facilities supporting their teaching and learning. 43% respondents choose to answer need for improvement and 7% users think the libraries facilities and services are supporting teaching and learning.</p>		
6.1.10	Describe the mechanism to obtain feedback from users on the library policy, services and procedures.	<p>UTeM Library has 3 methods that we implements to get feedback from our user.</p> <p>Library officer will evaluate the question and pass up to the unit that related to solve the problem.</p> <p>Library officer will response the problem, suggestion and complaint as soon as</p>		PRSTKAAN

		<p>possible through email or telephone to user.</p> <p>Suggestion box : User need to fill the form, list all comment and drop into the box.</p> <p>Telephone : Users directly call by phone to reference officer. Officer will take note the problem/ suggestion/ complaint. Officer will answer directly if user asking a simple question.</p> <p>Email : User can directly use an email library@utem.edu.my</p>	<p>Appendix F13</p> <ul style="list-style-type: none"> <li>• Borang Aduan Pengguna.</li> </ul> <p>Appendix F14</p> <ul style="list-style-type: none"> <li>• Reference Officer Form.</li> </ul>	
6.1.11	Explain the steps taken and the facilities provided by the HEP to promote research activities.	UTeM has been serious and proactive in promoting research activities among the academic staff. The University has identified seven thrust areas of research	<p>Appendix 15</p> <ul style="list-style-type: none"> <li>• THRUST AREAS and CLUSTERS Short term grants award URIS.</li> </ul>	TNC(P&I)/ CRIM

		and up to seven research clusters under each thrust areas. Each thrust areas is required to identify a Center of Excellence which is then provided with financial support for equipments and other facilities. The university short term research grants, awarded to academic staff also provides for purchase of research equipments in the research budget. The university has also developed – University Research Information System (URIS) to assist staff in managing their research activities as well as allowing the university to monitor the progress of the research activities.		
6.1.12	State the policy on the use of information and communication technology (ICT) in the HEP. Describe the ICT infrastructure that supports academic	In order to provide and secure the usage of ICT for UTeM’s personnel and students, Pusat Komputer has came up, revised and execute a total of 13 ICT policies which includes but not limited to emails, internal systems, network and	Appendix F16 <ul style="list-style-type: none"> <li>• Polisi Capaian Teknologi Maklumat.</li> <li>• Polisi Memelihara Dan Melindungi</li> </ul>	PK

	<p>programmes.</p>	<p>security. Below are the policies which have been adapted to UTeM's ICT environment.</p> <p>For the purpose of supporting the administration, teaching, learning and research environment in UTeM, Pusat Komputer have prepared the ICT infrastructure by using the latest technology available and yet affordable including wired and wireless networks, medium end computers and Internet connection.</p> <p>For each of the 3 UTeM Residents Colleges, a cyber café consists of 30 units of computers equipped with Internet facilities and printers have been setup for the convenience of the students to surf and acquire additional materials from the World Wide Web. The main cyber café</p>	<p>Maklumat Peribadi.</p> <ul style="list-style-type: none"> <li>• Polisi Pembangunan Laman Web.</li> <li>• Polisi Keselamatan Rangkaian.</li> <li>• Polisi Penggunaan Rangkaian Dan Penyambungan.</li> <li>• Polisi Keselamatan Operasi IT.</li> <li>• Polisi Keselamatan Kata Laluan.</li> <li>• Polisi Penggunaan Komputer Server.</li> <li>• Polisi Keselamatan Virus.</li> <li>• Polisi Capaian Internet.</li> <li>• Polisi Teknologi Maklumat Universiti Teknikal Malaysia Melaka.</li> <li>• Pengawalan Kemudahan Komputer Berinternet Universiti Teknikal</li> </ul>	
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		<p>which located at Pusat Komputer UTeM, can support up to 480 students simultaneously. Students can choose from a wide range of usage either it's for Internet surfing or preparing assignment.</p> <p>The labs, classes and venue for tutorials have been equipped with network resource in order to support e-learning materials. The local area network backbone can support up to 10Gbps with the capability of 1Gbps to each user, the ICT infrastructure is ready for the latest education concepts such as online lectures, VoIP and discussion via video conference which ever that suits the current learning needs and trends.</p> <p>The preparation of wireless hotspots supports the idea of nonstop learning environment where students can access</p>	<p>Malaysia Melaka.</p> <ul style="list-style-type: none"> <li>• Garis Panduan Penggunaan Dan Pengurusan Mel Elektronik.</li> </ul> <p>Internet Facilities</p> <p>Current network infrastructures are;</p> <ul style="list-style-type: none"> <li>• Using TMIPVPN to connected 3 campus is 2Mbps (Industrial Campus), 4Mbs (Main</li> </ul>	
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		<p>information, obtain online resources and surf the web from multiple places such as the cafeteria and the library. The facilities are also provided for the meeting rooms where the concept of paperless environment and the usage of e-meeting can be used to its full potential without compromising its security and confidentiality. A total of 17 units of AP are currently operational with 2 units in City Campus, 6 units in Industrial Campus and 9 units in Main Campus.</p> <p>Where else the to support the day to day academic operations, applications such as Student Information System (SMP), Post Graduates Information System (SMPS) and UTeM Research Information System (URIS) have been custom built by using internal resources.</p>	<p>Campus) and 2Mbps (City Campus).</p> <ul style="list-style-type: none"> <li>Restructured internet access facilities at Main Campus from 4Mbps (MIA TM) to 6Mbps (TMNet Direct).</li> </ul> <p>MIA = Managed Internet Access</p> <ul style="list-style-type: none"> <li>Internet access facilities at Industrial Campus 12Mbps (JARING).</li> </ul>	
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		<p>Computer Facilities</p> <p>2216 computer was provided for student for learning purpose and teaching process at laboratory, workshop or studio. University still maintain ratio of student and computer equivalent to 1:4 which is stated by Ministry of Higher Education.</p>		
6.1.13	List the ICT staff and their qualifications that support the implementation of the ICT policy at the HEP.	The list of ICT Staff and their qualifications	<p>Appendix F17</p> <ul style="list-style-type: none"> <li>List of ICT Staff.</li> </ul>	PK
6.1.14	<p>Indicate what plans exist to improve the educational facilities</p> <p>-- physical, library and ICT -- in line with the development in teaching practice.</p>	<ul style="list-style-type: none"> <li>In the year 2009, FKP and part of FKM moved to main Campus to fulfill at the FTMK.</li> <li>FKM and FKP will be given a priority to be constructed in 10<sup>th</sup> Malaysian Plan</li> </ul> <p>1. To upgrade the current Internet</p>		<p>PRSTKAAN/ PK/ PPPA</p>





		<p>Music room: User can feel relaxing study. Separate from open study space.</p> <p>Listening &amp; viewing rooms: User focus to view and listen media collection.</p> <p>Kiosk: Give information all about library in one equipment.</p>		
<b>Enhanced Standards</b>				
6.1.15	Explain how the HEP periodically reviews the adequacy, currency and quality of its educational resources.	<p>Every aspect of educational resources being review periodically through:</p> <ol style="list-style-type: none"> <li>1. Annual Report</li> <li>2. Mid Year Achievement Report</li> <li>3. Report presented during Mesyuarat Majlis ICT or Majlis ICT</li> <li>4. Feedback to other department in response to their ICT based</li> </ol>		<p>Jawatankuasa Pembangunan/ PK/ PRSTKAAN/ PPPA</p>

		project (PK)										
		Review through Library Yearly Report.										
6.1.16	Indicate what plans exist to improve these facilities in line with the development in the teaching practice.	<p>In 2004, the requirements and development of ICT facilities in accordance to UTeM's teaching practice have been catalogued in the <i>Information &amp; Communication Technology Strategic Plan (ISP)</i>. The scope of the Information &amp; Communication Technology Strategic Plan (ISP) is to encompass the requirements and implementation strategies for business processes, applications and services, and ICT info structure and infrastructure (soft infrastructure and hard infrastructure) for the period of 10 years.</p> <p>The planning period shall be categorized into 3 terms:</p>	<p>17 out of 31 ISP projects have been successfully implemented while the remaining 14 will proceed in RMK10. Below are the list of projects that are in queue for RMK10:</p> <p>Below are the list of projects that are in queue for RMK10:</p> <table border="1"> <thead> <tr> <th>No</th> <th>Project Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Teaching System (E-Learning)</td> </tr> <tr> <td>2.</td> <td>Voice Communication System (VOIP)</td> </tr> <tr> <td>3.</td> <td>Document Management System (OAS)</td> </tr> </tbody> </table>	No	Project Name	1.	Teaching System (E-Learning)	2.	Voice Communication System (VOIP)	3.	Document Management System (OAS)	PK/ PRSTKAAN / PPPA
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2.	Voice Communication System (VOIP)											
3.	Document Management System (OAS)											

	<ul style="list-style-type: none"> <li>i. Immediate &amp; Short Term (up to 3-year period)</li> <li>ii. Medium Term (4 to 6-year period)</li> <li>iii. Long Term (more than 6 years)</li> </ul> <p>Two classifications of business processes to support operation, namely:</p> <ul style="list-style-type: none"> <li>a. Academic Services Process <ul style="list-style-type: none"> <li>i. Education Delivery Services</li> <li>ii. Academic Management Services</li> <li>iii. Library Management Services</li> </ul> </li> <li>b. Support Services Process <ul style="list-style-type: none"> <li>i. Facilities Management Services</li> <li>ii. Student Management Services</li> <li>iii. Staff Management Services</li> <li>iv. Office Management Services</li> <li>v. Financial Management Services</li> <li>vi. ICT Management Services</li> </ul> </li> </ul>	4.	Business Continuity and Disaster Recovery Planning		
		5.	Provision of ICT Infrastructure for CCTV & Security System		
		6.	Video Conferencing System		
		7.	Lecture Hall Electronic Equipment		
		8.	Provision of ICT Infrastructure for PA System		
		9.	Electronic Bulletin Boards & Info Kiosks		
		10.	Integrated Building Management System		
		11.	Main Campus Network System & Data Center – New Hardware		

			12. Internet Access for Main Campus		
			13. Wireless Equipment for Main Campus /Hot Spot Area		
			14. Database – New Hardware		
6.1.17	Describe how students and faculty are provided with opportunities to learn the various and most current methods to access information.	For the purpose of supporting students and faculty, Pusat Komputer have prepared the ICT infrastructure by using the latest technology available and yet affordable including wired and wireless networks, medium end computers and Internet connection. For each of the 3 UTeM Residents Colleges, a cyber café consists of 30 units of computers equipped with Internet facilities and printers have been setup for the convenience of the students to surf			PRSTKAAN / PK

	<p>and acquire additional materials from the World Wide Web. The main cyber café which located at Pusat Komputer UTeM, can support up to 480 students simultaneously.</p> <p>The labs, classes and venue for tutorials have been equipped with network resource in order to support e-learning materials. The local area network backbone can support up to 10Gbps with the capability of 1Gbps to each user, the ICT infrastructure is ready for the latest education concepts such as online lectures, VoIP and discussion via video conference which ever that suits the current learning needs and trends.</p> <p>The preparation of wireless hotspots supports the idea of nonstop learning</p>		
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	<p>environment where students can access information, obtain online resources and surf the web from multiple places such as the cafeteria and the library. The facilities are also provided for the meeting rooms where the concept of paperless environment and the usage of e-meeting can be used to its full potential without compromising its security and confidentiality.</p> <p>The Library website at: <a href="http://library.utm.edu.my/">http://library.utm.edu.my/</a> is a comprehensive source of information about Library resources, services and facilities.</p> <p>Information Literacy Courses are offered to the library customers as an attempt to enable them to master</p>		
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		<p>searching techniques, disseminate information on library collections, facilities and services and thus making the library customers more self-directed and assume greater control over their own research and learning.</p> <p>Electronic journals: There are potentially very many electronic journals to which library user have accesses, usually from any devices within the University some resources will require a password which may be obtained from the librarian. Similarly, should library user have difficulty with any of the electronic journals, please contact the library in the first instance.</p> <p>Resource lists: presents a number of lists of online resources, each covering one subject area, and arranged in a</p>	<p>Appendix F21</p> <ul style="list-style-type: none"> <li>• Library UTeM website.</li> </ul> <p>Appendix F22</p> <ul style="list-style-type: none"> <li>• Surat Kelas Kemahiran Maklumat untuk Pembantu Penyelidik.</li> </ul> <p>Appendix F23</p> <ul style="list-style-type: none"> <li>• Electronic journals on library website at <a href="http://library.utem.edu.my/resource/onlinedbase/index.htm">http://library.utem.edu.my/resource/onlinedbase/index.htm</a></li> </ul> <p>Appendix F24</p> <ul style="list-style-type: none"> <li>• Electronic journals on library</li> </ul>	
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		<p>similar way to the classified sequence of books in the library. On each resource list library user will find links to various documents, chosen as being authoritative, which supplement the resources available in the library. It is hoped that these guides will be useful to those who are unable to visit the library in person, or who are having difficulty accessing heavily used books.</p> <p>WiFi: Library customers may also bring in their laptops to take advantage of the free WiFi. WiFi lightens demand for the library's desktop computers, which are often in use by residents, students, visitors from outside university. Patrons often are accustomed to using their own computer, with direct access to their own computer files.</p>	<p>website at <a href="http://library.utem.edu.my:8000/equip/custom/home.jsp">http://library.utem.edu.my:8000/equip/custom/home.jsp</a></p> <p>Appendix F25</p> <ul style="list-style-type: none"> <li>• Wi-Fi facility at library.</li> </ul>	
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6.1.18	How are these facilities user friendly to those with special needs?	<p>1. Special car park provision for this able</p> <p>2. Special toilet provision for this able</p> <p>3. Special access for OKU</p> <p>User can use all this facilities without guide from the counter staff and will save user time.</p> <p>OPAC (Online Public Access Catalog) : All library collection was listed in this system.</p> <p>User can search directly through the system and all information will appear in detail.</p> <p>Self check machine : User can charge library collection by itself through this machine in simple step.</p>	<p>Appendix F24</p> <ul style="list-style-type: none"> <li>• Electronic journals on library website at <a href="http://library.utem.edu.my:8000/equip/custom/home.jsp">http://library.utem.edu.my:8000/equip/custom/home.jsp</a></li> </ul> <p>Appendix F26</p> <ul style="list-style-type: none"> <li>• UTeM(ISO)/PS/PK33.</li> </ul>	<p>PPPA</p> <p>PRSTKAAN</p>
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		Photocopy/print : User can photocopy and print their document by self service directly from computer that provide by library.		
<b>6.2 Research and Development</b>				
<i>(PLEASE NOTE THAT THE STANDARDS ON RESEARCH AND DEVELOPMENT ARE LARGELY DIRECTED TO UNIVERSITIES AND UNIVERSITY COLLEGES)</i>				
<b>Benchmarked Standards</b>				
6.2.1	Describe the policy and planning that identifies the priorities, facilities and development in research and commercialisation.	Research Policy and Guideline was approved by Senate Meeting No. 4/2005 on 26 May 2005 through paperwork number 20/2005.  First review of the policy was done on 26 December 2008 by the University Research Committee. The committee proposed to combine the research policy with the Intellectual Property and Commercialization Policy to formed The	Appendix F27  • Letter of Senate Minutes Meeting with reference number. UTeM(s)02.06.03/10.13/8 JLD 7(6)	CRIM/Faculties

		Research and Innovation Policy and Guideline. The policy is in the process of senate approval.		
6.2.2	Summarise the major research interests at the HEP. Describe the research facilities to support these areas of interest.	<p>UTeM has identified Advanced Manufacturing Technology (AMT) as its niche area. The Niche Area is supported by seven thrust areas which covers several research clusters.</p> <p>Activities within the research clusters off the thrust area are conducted in research laboratories equipped with the key and supporting equipments, computers and dedicated software.</p> <p>UTeM provides short term grant worth up to RM 30k per project and Research Assistant Schemes to assist in conducting the research works.</p> <p>University Research Information System</p>	<p>Appendix F15</p> <ul style="list-style-type: none"> <li>Seven Thrust Area and Research Clusters.</li> </ul> <p>Appendix F28</p> <ul style="list-style-type: none"> <li>List of Research Equipment.</li> </ul> <p>Appendix F29</p> <ul style="list-style-type: none"> <li>Research Policy and Guideline.</li> </ul>	CRIM/Faculties

		(URIS) has been developed by the university to facilitate research activities. The System enables online application of research grants as well as monitoring of research activities and progress. These include but not limited to Financial management, Asset procurement and inventory, guidelines and policy.		
6.2.3	Describe any programmes on ethics in research for staff and graduate students. Describe the formal policy related to scientific misconduct in research (e.g., deception, fabrication of results, plagiarism, and conduct outside the norm of scientific behaviour) and how it is disseminated.	<p>Good practice in research should be carried out methodically and with professional integrity within the bounds of ethical and legal considerations. The University sets out its position with regard to good research practice in all its research activities.</p> <p>For Graduate students Research Methodology programme (MPSW 5013 and PPSW 6013) are compulsory subjects which contain topics on ethics in research.</p>	<p>Appendix F30</p> <ul style="list-style-type: none"> <li>Letter to Academic UTeM's Staffs About development of URIS.</li> </ul> <p>Appendix F31</p> <ul style="list-style-type: none"> <li>MPSW 5013 and PPSW 6013 - Research Methodology syllabus.</li> </ul> <p>Appendix F32</p> <ul style="list-style-type: none"> <li>Research Policy and</li> </ul>	CRIM/Faculties/ Registrar/PPS

		<p>The Research Policy and Guideline clearly emphasise on ethics in research which has to be followed by all academic staffs and students.</p> <p>Academic staffs are required to attend PTK 3 which contains topic on ethic in research.</p> <p>All academic staff for further studies are required to attend research methodology course which contain module on ethics in research</p> <p>With regard to scientific misconduct, the</p>	<p>Guideline Refer to paragraph 4.3 ( page 19 ).</p> <p>Appendix F33</p> <ul style="list-style-type: none"> <li>• PTK 3 module.</li> </ul> <p>Appendix F34</p> <ul style="list-style-type: none"> <li>• Research Methodology Course Module.</li> </ul> <p>Appendix F32</p> <ul style="list-style-type: none"> <li>• Research Policy and Guideline (Refer to paragraph 4.4 (page 21).</li> </ul>	
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		research and policy guideline clearly emphasise on research misconduct to be followed by academic staffs and students		
6.2.4	Specify the administrative entity that is responsible for protecting the integrity of the research processes.	Center for Research and Innovation Management (CRIM) is the administrative body that manage and coordinate research activities of UTeM. Jawatankuasa Tetap Senat Penyelidikan, Inovasi & Hubungan Industri and Jawatankuasa Penyelidikan Universiti are the respective committees that provide support to UTeM Senate in implementing university's policies on Research, Intellectual Property and Commercialisation and thereby ensuring the integrity of the research processes.	Appendix F35 <ul style="list-style-type: none"> <li>• Pekeliling Penamaan Semula UNIC kepada CRIM and Pekeliling Penstrukturan semula Jawatankuasa Tetap Senat.</li> </ul>	CRIM
6.2.5	Describe the facilities and the budget allocation made available by the HEP to support research.	UTeM has developed UTeM Research Information System (URIS). The system is developed to enable online application of research grant as well as online monitoring research activities and	Appendix F30 <ul style="list-style-type: none"> <li>• Letter to UTeM's academic staffs about development of URIS.</li> </ul>	CRIM/ PK/Faculties

		<p>progress. This includes research details, research financial management, research output, policy and forms.</p> <p>Disbursement of Short Term Grant amount RM 7 Million since 2003. This does not include grant awarded by both MoSTI and MoHE as follows:</p> <ol style="list-style-type: none"> <li>1. IRPA RM748,000.00</li> <li>2. Science Fund RM 1,785,950.00</li> <li>3. FRGS RM 5,028,590.00</li> </ol> <p>The university also encourage researchers to closely work with industries in solving industry's based problem through the signing of MoU's and MoA's</p>	<p>Appendix F36</p> <ul style="list-style-type: none"> <li>• Short Term Report since 2003 until 2009.</li> </ul> <p>Appendix F37</p> <ul style="list-style-type: none"> <li>• Table of list grant.</li> </ul> <p>Appendix F38</p> <ul style="list-style-type: none"> <li>• List of MoU and MoA between UTeM and Industries.</li> </ul>	
6.2.6	List the major research activities and the academic staff involved	UTeM participated in National and International Research Exhibition and	<p>Appendix F39</p> <ul style="list-style-type: none"> <li>• List of UTeM Participant</li> </ul>	CRIM

	in them in the last five years.	<p>Competition.</p> <p>UTeM organised internal seminar for research evaluation which called Research Achievement Seminar (REACH)</p> <p>UTeM collaborated with UMP, UniMAP and UTHM which form a network called Malaysian Technical University Network (MTUN) in organising research programmes.</p>	<p>and Award.</p> <p>Appendix F40</p> <ul style="list-style-type: none"> <li>List of academic staffs involved in REACH.</li> </ul> <p>Appendix F41</p> <ul style="list-style-type: none"> <li>List of academic staffs involved in FORTUNE and MUCEET.</li> </ul>	
6.2.7	Describe how the HEP fosters interaction between its research and educational activities.	The Senate and through its committees, is the responsible body for enacting legislation governing the scholarly and teaching activities of the University. The Senate committee for Research and Innovation and Industry Relation reports directly to the senate and this ensures that research and educational activities are integrated. At the Faculty level, the faculty committee for research, chaired	<p>Appendix F29</p> <ul style="list-style-type: none"> <li>The Research Policy and Guidelines (paragraph 3.0).</li> </ul>	CRIM/Faculties



		by the faculty dean and comprising all deputy deans and head of departments of the faculty, ensures that senate decisions are implemented.		
6.2.8	Explain the mechanism that exists to ensure research activities are reflected in the curriculum and teaching.	The faculty undergo regular curriculum review exercise in order to ensure that students will be learning about recent advances as well as latest theories, techniques and technologies. Experienced research and teaching staff with expertise in the specialist fields together with industry advisors sits on the Curriculum Advisory Panel of the faculty. The recommendations of the panel are brought to the Faculty Academic committee and eventually to the Senate for approval.		Faculties
6.2.9	State any initiatives taken by departments to engage students in research.	The university strongly encourages researchers to engage undergraduate and postgraduate students to participate in research activities and these initiatives are	Appendix F37 <ul style="list-style-type: none"> <li>Table of list grant.</li> </ul>	CRIM/Faculties/ PPS

		clearly reflected in the grants awarded by the university. At undergraduate level, the student's final year projects are supported by the grants through purchase of equipments and accessories. At the postgraduate level, graduate research assistants are engage to conduct research for their masters and PhD degrees by the number of research grants awarded by the university and other funders.		
<b>Enhanced Standards</b>				
6.2.10	Show the link between research, development and commercialization.	<p>Stated in Research Policy and Guideline ( Policy-Section 5.0 and on Guideline-section 2.23)</p> <p>Jawatankuasa Tetap Senat Penyelidikan, Inovasi dan Perhubungan Industri has indicated in the Term of References the link between research, development and commercialisation.</p>	<p>Appendix F29</p> <ul style="list-style-type: none"> <li>• Research Policy and Guideline.</li> </ul> <p>Appendix F35</p> <ul style="list-style-type: none"> <li>• Pekeliling Penstrukturan semula Jawatankuasa Tetap Senat.</li> </ul>	CRIM

		<p>MoU signing between UTeM and Industrial partners shows the link for commercialisation of research products</p> <p>The UTeM has also setup UTeM Holdings Sdn. Bhd. , a wholly own holding company, as a vehicle to commercialize research product of the university.</p>	<p>Appendix F38</p> <ul style="list-style-type: none"> <li>List of MoU and MoA between UTeM and Industries.</li> </ul> <p>Appendix F42</p> <ul style="list-style-type: none"> <li>Approval paperwork UTeM Holdings Sdn. Bhd setup.</li> </ul>	
6.2.11	List and describe the research, development and commercialisation activities and achievements in the last five years.	<p>UTeM organised Seminar Harta Intelek, UTeM Expo (UTeMEX) and Industrial Advisory Panel ( IAP) meeting</p> <p>UTeM has file for patent of research products and recognize several potentially commercialized research products.</p>	<p>Appendix F43</p> <ul style="list-style-type: none"> <li>Approval minutes of Seminar Harta Intelek, UTeM Expo (UTeMEX) and Industrial Advisory Panel ( IAP) meeting.</li> </ul> <p>Appendix F44</p> <ul style="list-style-type: none"> <li>Approval letter from patent agent.</li> </ul>	CRIM

		List of awards won in exhibitions and competitions.	Appendix F39 <ul style="list-style-type: none"> <li>List of UTeM Participant and Award.</li> </ul>	
6.2.12	Describe the processes where the HEP reviews its research resources and facilities and the steps taken to enhance its research capabilities.	<p>Jawatankuasa Penyelidikan Fakulti identify the needs of the research clusters under the thrust area and presented to Jawatankuasa Penyelidikan Universiti for deliberation. The recommendation of the JKPU is then presented to Jawatankuasa Tetap Senat Penyelidikan, Inovasi dan Perhubungan Industri for endorsement.</p> <p>Establish network with industries and research institutes both nationally and internationally</p>	<p>Appendix F45</p> <ul style="list-style-type: none"> <li>Jawatankuasa Penyelidikan Fakulti, Jawatankuasa Penyelidikan Universiti and Jawatankuasa Tetap Senat Penyelidikan, Inovasi dan Perhubungan Industri Term of references.</li> </ul> <p>Appendix F46</p> <ul style="list-style-type: none"> <li>UTeM Strategic Plan.</li> </ul>	CRIM
6.2.13	Describe the incentives to academic staff to engage in publication, including in reputable refereed journals.	UTeM organised an annual programme to recognise the achievement of researchers that include writing in journals, books and participation in exhibition. The programme is called	<p>Appendix F47</p> <ul style="list-style-type: none"> <li>Approval minutes and paper work of Malam CIPTA</li> </ul>	CRIM

		<p>Malam CIPTA- Cetusan Inspirasi Projek Teknikal dan Aplikasi.</p> <p>The successful researchers are awarded monetary reward based on the impact factor of the journal where their papers were published.</p>		
6.2.14	List and describe the major publications of the academic staff in the last five years.	The major publications of the academic staff in the last five year	<p>Appendix F48</p> <ul style="list-style-type: none"> <li>Table of major publication of UTeM staffs and books.</li> </ul>	CRIM
<b>6.3 : Educational Expertise</b>				
<b>Benchmarked Standards</b>				
6.3.1	Describe the policy and practice on the use of appropriate educational expertise in planning educational programmes and in the development of new teaching and assessment methods.	The aims and objectives of PPP are to plan, implement and evaluate trainings and skill based programmes conducted to upgrade the quality of teaching and learning among the lecturers, and also to generate a training module to execute training programmes so as to increase	<p>Appendix F49</p> <ul style="list-style-type: none"> <li>Courses and activities organized by PPP, PPB and faculties.</li> <li>Faculties' business plan document.</li> </ul>	Faculties /PPP/PPB/ CRIM/Senate

		<p>the quality of teaching and learning. Upon completing all the modules, the lecturer receives a Teaching and Learning Certificate.</p> <p>Through MS ISO 9000 certification, PPP also execute and encourage comprehensive research, as well as development activities in order to increase the quality of teaching and learning. PPP has developed guidelines and policy on e-Learning and Outcome-Based Education as a platform for professional training.</p> <p>Teaching and learning are two educational interactions of giving and receiving knowledge for established centres such as PPP, PPB and CRIM.</p> <p>The objectives of PPP will be more successful with their collaborative</p>	<ul style="list-style-type: none"> <li>• Refer to Practice and Application Oriented Education (PAO).</li> <li>• Refer to Dasar Pengajaran dan Pembelajaran UTeM.</li> </ul>	
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		between PPP and others faculty. Occasionally, PPP will offer new modules related to each faculty for knowledge development of its staff.		
<b>Enhanced Standards</b>				
6.3.2	Describe the access to educational expertise, both internal and external, and its utilisation for staff development and research.	<p>The staff will get some ideas and extra knowledge to explore the opportunity through the programs, such as visiting professors or lecturers, adjunct professors, external examiners and IAP members.</p> <p>Each faculty will implement in-house trainings that focus on technical contents.</p> <p>The faculty also will encourage lecturers to present their project or research at national and international conferences, and also to publish their findings at</p>	<p>Appendix F50</p> <ul style="list-style-type: none"> <li>• Paperwork endorsed by Senate.</li> <li>• Schedule of professorial talks.</li> <li>• Reports of conference and journal publishing.</li> <li>• Advance Manufacturing Technology (AMT) journal.</li> <li>• Technology Management.</li> </ul>	Faculties/Senate /CRIM

		international and national journals. Finally, the faculties also will set their targets for more short grants, FRGS or e-science funds to do research.		
<b>6.4 Educational Exchanges</b>				
<b>Benchmarked Standards</b>				
6.4.1	Describe the practice of the HEP in collaborating and cooperating with other providers for exchanges of student, staff, and resources in compliance with the HEP's policy. Provide information on these exchanges for the last five years.	<p>Students and staff mobility is one of the ways to enhance the access to higher learning. UTeM is planning to start its Student Mobility Programme. Consequently, it is one of UTeM's efforts to ensure that the students are competent to work globally. The exposure to a different style of learning process and surroundings will definitely increase their knowledge and skills.</p> <p>The objectives of Student Mobility Programme are :</p>	<p>Appendix F38</p> <ul style="list-style-type: none"> <li>List of MoU and MoA between UTeM and Industries.</li> </ul>	BPAA/BPAK/ HEPA/Faculties



	<p>a) To promote the culture of sharing experiences and interactions between IPTAs, MTUN and International Higher Learning Institution (IHLI).</p> <p>b) To give opportunities to students and staff to experience the differences in the learning process.</p> <p>c) To broaden the experience of learning amongst students and staff.</p> <p>There are several terms and conditions need to be fulfilled before a student is permitted to apply and join this Student Mobility Programme. The applicant must be a registered student with current CGPA of at least 3.0 and he or she must be free from any disciplinary action. Whereas, the participating universities will run this programme based on the</p>		
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		<p>Principle of “reciprocity”.</p> <p>The students who undergo this credit programme may then proceed to apply for credits transfer subject to terms and conditions which applies to UTeM’s Academic Regulations.</p> <p>In the existing collaborative links with other HEPs, the nature of collaboration includes :</p> <ul style="list-style-type: none"><li>a) Research and development through cross or joint research and technology transfer among faculties or universities.</li><li>b) Human Resource Development Unit will manage the academic staff to further their studies or industrial attachment, and send them to the relevant industry.</li></ul>		
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		<p>c) Academic Program Development Students will be offered special programs such as Split Programme and Dual Degree Programme.</p> <p>d) Students exchange Students will get new experience from studying in another institution of higher learning.</p> <p>Staff exchange among academic and non-academic will get new knowledge and technology through post doctorate and sabbatical programmes.</p> <p>Collaboration programmes between UTeM and Industries or other universities. Industrial exposure involves visiting industries, using industrial facilities to conduct industry-based projects, using industrial software and</p>		
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		others. In addition, it may include organising seminars, lectures, and symposiums at the industry.		
<b>Benchmarked Standards</b>				
6.4.2	Describe how is this collaboration disseminated to students and faculty.	Dissemination of information through UTeM website, posters, flyers, buntings, banners, radio, newspapers.	<ol style="list-style-type: none"> <li>1. <a href="http://www.utem.edu.my">www.utem.edu.my</a>.</li> <li>2. Invitation letters/ cards.</li> <li>3. Monthly gathering with the VC.</li> <li>4. Undergraduates Orientation Weeks.</li> </ol>	Penerbit Universiti /Faculties/ BPAK
6.4.3	How do the educational exchanges benefit the HEP?	Students and staff will have the opportunity to share the knowledge of Industrial Based Project, Networking for employability and Internationalization (undergraduate & postgraduate).	<ol style="list-style-type: none"> <li>1. Offer letters, certificates, training reports.</li> <li>2. PSM reports.</li> </ol>	Faculties/CRIM/ Industries/ Universities
<b>Enhanced Standards</b>				
6.4.4	Describe the future plans to strengthen international collaborative activities.	UTeM has signed several MoUs or MoAs with universities and industries, locally and internationally. The signing enables staff and student to do research collaboration, academic development,	<ol style="list-style-type: none"> <li>1. Refer to 7 thrust areas.</li> <li>2. Pelan strategik UTeM (UTeM Strategic Planning).</li> </ol>	Faculties /CRIM /BPAA

	<p>staff or student visits, visiting professors or lecturers, external examiners, sports and recreations.</p> <p>As a technical university, UTeM is a member of Malaysian Technical University Network (MTUN), and with MTUN, MoU has been signed with Institutes of Technology Ireland (IOTI), and we are looking forward to collaborating with Australian Technology Network (ATN).</p> <p>UTeM is also planning to have more joint PhD and Masters programme with esteemed universities throughout the world, especially our partner universities. We are also planning to have joint research collaboration with universities, which we have MoU signed with.</p> <p>UTeM has developed a Strategic Planning</p>		
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		for 2009-2010 in order to achieve its vision.		
6.4.5	How would a policy on exchanges with international institutions benefit the HEP?	<p>1. The Policy of Internationalisation of UTeM.</p> <ul style="list-style-type: none"> <li>• The policy constitutes 5 main topics :-</li> </ul> <p>a) Student</p> <ul style="list-style-type: none"> <li>- International students' Intake.</li> <li>-Local students' development</li> <li>-Learning process</li> </ul> <p>b) Staff</p> <ul style="list-style-type: none"> <li>-International staff's intake</li> <li>- Staff's development (academic and non-academic)</li> <li>- Staff's visits to Overseas</li> </ul>		BPAA/CRIM/PPS /Faculties

		<p>c) Infrastructure</p> <ul style="list-style-type: none"><li>- Hostels</li><li>- Visas and Student Passes</li><li>- Health and insurance</li><li>- Counselling and self adaptation</li></ul> <p>- Social and safety</p> <p>d) International collaboration</p> <ul style="list-style-type: none"><li>- Strategic partners</li><li>- Collaboration between Partners.</li><li>- Activities and cost Implications.</li></ul> <p>e) Management and Administration</p> <ul style="list-style-type: none"><li>- Relevant departments</li></ul> <p>This valuable policy is created to enhance University's reputation, the graduate's</p>		
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		quality, as well as the quality of research and innovation.		
6.4.6	Describe the facilities and financial allocation to support educational exchanges.	<p>In order to enable student and staff exchange to be implemented, UTeM has to provide incentives, such as allowances, food and lodging, ICT facilities, lab equipment and RA grants.</p> <ol style="list-style-type: none"> <li>1. Industrial attachment.</li> <li>2. Student Mobility <ul style="list-style-type: none"> <li>- As for the Student Mobility Programme, students will spend 1 semester at the Host University and take up relevant subjects.</li> </ul> </li> </ol> <p>They will be given the privilege of credit transfer according to the UTeM's Academic Regulation on that particular matter. Regarding the fees, students are required to pay normal fees to Home</p>		PPPA/Bursary/ BPA/BPAK/BPAA/ HEPA/CRIM



		<p>University, and Host University is not entitled to any fees from the students participating in the programme.</p> <p>Host University will help to find a hostel for participating students for free, and the students are entitled for facilities like medical, recreation, sports, computers/internet, just like other students at the Host University.</p> <p>3. Postdoctoral or sabbatical policy</p>		
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6.5 Financial Allocation							
Benchmarked Standards							
	Description	Action				Evidence	Relevant Parties
6.5.1	Provide information on the HEP's financial standing and sources which supports its academic, research and services missions.	No	Activities	Financial Instrument	Sources	Appendix F51 <ul style="list-style-type: none"> <li>Surat Peruntukan Perbelanjaan Mengurus &amp; Pembangunan</li> <li>Surat Pembayaran Peruntukan Penyelidikan</li> </ul>	Bursar/PPPA/CRIM
i.	Academic	Operating Grant	MOHE				
ii.	Services	Operating Grant	MOHE				
iii.	Development	Development Grant	MOHE				
iv.	Research	Research Grant	MOHE & MOSTI				

6.5.2	Demonstrate how the financial allocation dedicated to the HEP – and its utilisation – is sufficient for it to achieve its purpose.	No	Financial Instrument	Duration	Allocation Base	Appendix F52 <ul style="list-style-type: none"> <li>• Pekeliling Perbendaharaan Bil.2/2009</li> <li>• Garis Panduan Penyediaan Cadangan Perbelanjaan Tahun 2010 &amp; 2011</li> <li>• Surat Pekeliling Bendahari Bil.8/2008 – Penyediaan Cadangan Bajet Mengurus Tahun 2010 &amp;</li> </ul>	Bursar/PPPA/CRIM
i.	Operating	Every 2 Years (budget proposal need to be reviewed annually)	<i>Dasar Baru</i> - New programme of HEP <i>One Off</i> - Equipment and one off programme				
ii.	Development	5 Years	Development-Master Plan				
iii.	Research	By Application	Application by Researcher				

					2011	
6.5.3	Indicate the responsibilities and line of authority in terms of budgeting and resource allocation in the HEP.	No.	Authority	Responsibilities	Appendix F53	Bursar
		i.	University Board of Director (LPU)	Approval university budget application & allocation proposal	<ul style="list-style-type: none"> <li>Perlembagaan Universiti, P.U.(A) 45 Bahagian III, Seksyen 16</li> </ul>	
		ii.	Jawatankuasa Tetap Kewangan (JTK)	Endorsement university budget application & allocation proposal	<ul style="list-style-type: none"> <li>Perlembagaan Universiti, P.U.(A) 45 Bahagian V, Seksyen 37</li> </ul>	
		iii.	Vice Chancellor (NC)	Recommendation budget application & allocation proposal	<ul style="list-style-type: none"> <li>Perlembagaan Universiti, P.U.(A) 45 Bahagian II, Seksyen 12</li> </ul>	
		iv.	Head of	Managing the department budget	<ul style="list-style-type: none"> <li>Perlemb</li> </ul>	

		<table border="1"> <tr> <td data-bbox="856 303 928 462"></td> <td data-bbox="928 303 1157 462">Departments</td> <td data-bbox="1157 303 1444 462">allocation</td> </tr> <tr> <td data-bbox="856 462 928 678">v.</td> <td data-bbox="928 462 1157 678">Bursary</td> <td data-bbox="1157 462 1444 678">As a secretariat and monitoring the University budget</td> </tr> </table>		Departments	allocation	v.	Bursary	As a secretariat and monitoring the University budget	<p>agaan Universiti, P.U.(A) 45 Bahagian III, Seksyen 20 (2)</p> <p>Perlembagaan Universiti, P.U.(A) 45 Bahagian II, Seksyen 13</p>	
	Departments	allocation								
v.	Bursary	As a secretariat and monitoring the University budget								
6.5.4	Describe the policy on tuition fees and other payments, and the policy of refund to students who withdraw or who are dismissed from the institution.	<table border="1"> <tr> <td colspan="2" data-bbox="856 889 1444 945">Policy of tuition fees</td> </tr> <tr> <td data-bbox="856 945 1073 1107">New Students</td> <td data-bbox="1073 945 1444 1107"> <ul style="list-style-type: none"> <li>Fees to be paid on registration day.</li> </ul> </td> </tr> <tr> <td data-bbox="856 1107 1073 1424">Senior Students</td> <td data-bbox="1073 1107 1444 1424"> <ul style="list-style-type: none"> <li>For self sponsored students                             <ul style="list-style-type: none"> <li>the latest is one day after semester break.</li> </ul> </li> <li>For students who are loans being terminated,</li> </ul> </td> </tr> </table>	Policy of tuition fees		New Students	<ul style="list-style-type: none"> <li>Fees to be paid on registration day.</li> </ul>	Senior Students	<ul style="list-style-type: none"> <li>For self sponsored students                             <ul style="list-style-type: none"> <li>the latest is one day after semester break.</li> </ul> </li> <li>For students who are loans being terminated,</li> </ul>	<p>Appendix F54</p> <ul style="list-style-type: none"> <li>Pekeliling Bendahari Bil.1/2003 – Peraturan Pembayaran Pelajar</li> </ul>	Bursar
Policy of tuition fees										
New Students	<ul style="list-style-type: none"> <li>Fees to be paid on registration day.</li> </ul>									
Senior Students	<ul style="list-style-type: none"> <li>For self sponsored students                             <ul style="list-style-type: none"> <li>the latest is one day after semester break.</li> </ul> </li> <li>For students who are loans being terminated,</li> </ul>									

			<ul style="list-style-type: none"> <li>the latest is second day after the semester break.</li> </ul>		
		Policy of refund to students who withdraw or dismissed from the institution			
		Students being dismiss	<ul style="list-style-type: none"> <li>Students must pay all the tuition fees in the semester where the students are being dismiss.</li> </ul>		
		Students withdraw during enrolment	<ul style="list-style-type: none"> <li>Students who withdraw after 14 days of enrolment must pay all the tuition fees.</li> <li>New students who withdraw within 14 days with the permissions of the university are entitled to get back a portion of tuition fees which has been paid earlier after the semester break.</li> </ul>		

		<p>The tuition fees and other payments were first determine in 2001 based on comparison made with other HEP. Subsequently , UTeM revised the tuition fees for industrial training students twice which is in 2004 (RM959) and 2006 (RM781). A comparison on industrial training students' tuition fees had been done among other IPTA's as well. UTeM applied the credit per hour rate(RM56) for extend students starting 2006.</p>		
6.5.5	<p>Provide information on number of students who are funded through loans, grants or scholarship. What are the major sources of student funding?</p>	<ul style="list-style-type: none"> <li>• Post graduates grants from MOSTI for 2009 is RM79,475 involving 10 students until March 2009.</li> </ul> <p>Undergrads</p> <ul style="list-style-type: none"> <li>• Generally around 90% of our student request loan or scholarship. However only 90% students requesting the loans were granted.</li> </ul>		<p>BPA</p> <p>BURSAR</p>

Sources	No. of Student	Percentage
Loans	4516	96% (85% - major source is PTPTN)
Grants (post graduates)	10	-
Scholarship	190	4 %

- There are several body which give loans and scholarship to our student such as Jabatan Perkhidmatan Awam, MARA, PTPTN, Yayasan Pelajaran from every state in Malaysia, Yayasan Telekom, Felda and many more



Enhanced Standards																		
6.5.6	Describe how those responsible for a programme enjoy sufficient autonomy to allocate and utilise resources to achieve the programme objectives  A) Budgeting	<table border="1"> <thead> <tr> <th>No</th> <th>Authority</th> <th>Scope</th> </tr> </thead> <tbody> <tr> <td>i.</td> <td>Vice Chancellor (NC)</td> <td>Budget allocation: Approve budget allocation proposed by Bursar Virement: Approve virement for total budget</td> </tr> <tr> <td>ii.</td> <td>Bursar</td> <td>Budget allocation: Identify committed expenditure and proposal allocation for Cost Center (PTJ) Virement: Approve virement within <i>standard object</i> (objek am)</td> </tr> <tr> <td>iii.</td> <td>Head of Department</td> <td>Budget allocation: allocate budget according to programme plan Virement: Approve virement within detail object (objek sebagai)</td> </tr> </tbody> </table>			No	Authority	Scope	i.	Vice Chancellor (NC)	Budget allocation: Approve budget allocation proposed by Bursar Virement: Approve virement for total budget	ii.	Bursar	Budget allocation: Identify committed expenditure and proposal allocation for Cost Center (PTJ) Virement: Approve virement within <i>standard object</i> (objek am)	iii.	Head of Department	Budget allocation: allocate budget according to programme plan Virement: Approve virement within detail object (objek sebagai)	Appendix F55  • Pekeliling Bendahari Bilangan 2/2008	Vice Chancellor/ Bursar/ Head Of Department
		No	Authority	Scope														
		i.	Vice Chancellor (NC)	Budget allocation: Approve budget allocation proposed by Bursar Virement: Approve virement for total budget														
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		No	Authority	Approval Value														
		i.	Lembaga Perolehan A	Tender : More than RM 20 Million														
ii.	Lembaga	Tender :																

			Perolehan B	More than RM 500,000 to RM 20 Million		
		iii.	Jawatan Kuasa Sebut Harga	Sebut Harga : RM 50,000 to RM 500,000		
		iv.	Jawatan Kuasa Sebut Harga (Department)	Direct Purchase : Below RM50,000		