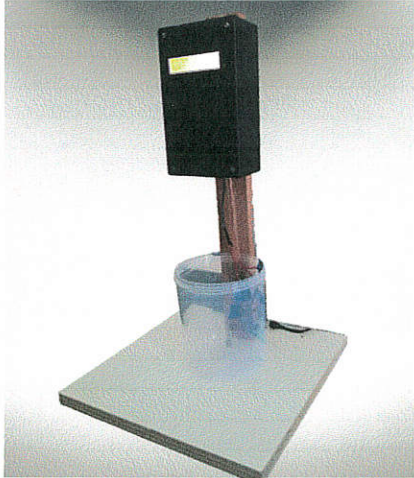


BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT INFORMATION																
Program <i>Program</i>	DEP5A																
Jabatan <i>Department</i>	Electrical Engineering Department																
Semester/ Tahun <i>Semester/ Year</i>	Semester 5 / June 2017																
Tajuk Projek <i>Project Title</i>	Flood Detector Using GSM Technology																
Jenis Projek <i>Type of Project</i>	Hardware and Software																
Kategori Kluster Penyelidikan <i>Category/ research Cluster</i>	Tanda “ / ” pada yang berkenaan: <i>Please tick “ / ” where applicable:</i> <table border="1"> <tbody> <tr> <td>☐</td><td>Sains tulen (<i>Pure Science</i>)</td></tr> <tr> <td>☐</td><td>Sains gunaan (<i>Applied Science</i>)</td></tr> <tr> <td>☒</td><td>Teknologi dan kejuruteraan (<i>Technology and Engineering</i>)</td></tr> <tr> <td>☐</td><td>Sains kesihatan dan klinikal (<i>Clinical and Health Sciences</i>)</td></tr> <tr> <td>☒</td><td>Sains sosial (<i>Social Sciences</i>)</td></tr> <tr> <td>☐</td><td>Sastera dan sastera ikhtisas (<i>Arts and Applied Arts</i>)</td></tr> <tr> <td>☐</td><td>Warisan alam dan budaya (<i>Natural Sciences and National Heritage</i>)</td></tr> <tr> <td>☒</td><td>Teknologi maklumat dan komunikasi (<i>Information and Communication Technology</i>)</td></tr> </tbody> </table>	☐	Sains tulen (<i>Pure Science</i>)	☐	Sains gunaan (<i>Applied Science</i>)	☒	Teknologi dan kejuruteraan (<i>Technology and Engineering</i>)	☐	Sains kesihatan dan klinikal (<i>Clinical and Health Sciences</i>)	☒	Sains sosial (<i>Social Sciences</i>)	☐	Sastera dan sastera ikhtisas (<i>Arts and Applied Arts</i>)	☐	Warisan alam dan budaya (<i>Natural Sciences and National Heritage</i>)	☒	Teknologi maklumat dan komunikasi (<i>Information and Communication Technology</i>)
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Abstrak <i>Abstract</i>	Flood is the main problem to people because it can risk a people life and do damaged to infrastructure like building, house and many more. This issue always occurred every year and this disaster never stop. The second problem is people doesn't alert the incoming of flood in their area and that can risk their life if they didn't take any action from the flood events. The flood also brings diseases such as Leptospirosis, Cholera, Typhoid fever, Hepatitis A, Conjunctivitis and Dengue fever. The purpose of this project is to develop a local real-time flood monitoring and warning system for the selected communities. This study focuses only on the detection and early warning alert system (via cell phone text messages) that will alert local subscribers of the potential flood events. Furthermore, this system is interactive wherein all non-registered subscribers could inquire the actual water level of the desired area location they want to monitor. An estimated time a particular river waterway will overflow is also included in the analyses. The hardware used in the design is split into several																

	parts namely: the water level detector, GSM module, and microcontroller development board.
Keyword <i>Keyword</i> (max 5 word)	1. Flood Detector 2. GSM SIM900A 3. Arduino 4. Warning Device 5. Wireless System
Objektif Projek <i>Project Objectives</i>	i. To make a warning system that can give out warning to authorities and take action quickly to help the residents. ii. To deliver information to both local resident and authorities quickly using GSM module system. iii. To monitor the water level continuously, this system can operate for 24 hours.
Skop Projek <i>Project scope</i>	The location to put the project: i. Residential area near the river. ii. Village or town in low level area. iii. Rural area with bad water drainage. iv. Bridge
IP No	Tiada
Dapatan <i>Finding</i> (500 words max)	1. We have taken some several types of water which are river water, sea water and distilled water. After get all the type of water, we using a "Simple Tester" to test the electric flow in the water. 2. We get the analysis that tap water can't conductivity the electric flow in the water because the voltage in this project to low and it need at least 9V to conduct the electric in the water while another type water of river and sea water can conduct the electric in water even its using 5V power source. 3. Time taken is to analyzing for ensuring the SMS sent from GSM accurate and on time. We do not want SMS sent to user late because it is involving the users action taken when the flood occurs in that area. We have set the time to send SMS every 10 seconds (the time can be set by user) to the user when the sensor is trigger at the medium and high level.

Cadangan untuk kerja-kerja akan datang <i>Suggestion for future work (500words)</i>	The project can also be improved in the future. Our project is just a small scale, which can be constructed with low cost and does not have complicated process of this prototype build-in. The LCD that we use on our project can be replace to the larger LCD as an example of LCD on the highway or in the city. Based on this method, everyone can easily get the flood information that has been shown on the large and easy to view screen. For the buzzer, it can be replaced with a siren sound because the buzzer can only be heard on a limited distance while sirens can be heard larger scale distance and siren can alert the everyone about the pre-flood event. Furthermore, GSM can be replaced by IOT technology (Internet of Thing) where GSM only can send SMS to users while IOT can provide information via internet. Moreover, our sensor can be replaced with water float sensor which it function is more durable and long lasting. Lastly, the Arduino Uno we use as our project microprocessor can be replaced with multi-function microcontroller, because Arduino only can use small voltage which is +5V, while microcontroller can use a higher voltage.	
Gambar berkaitan projek <i>Picture related to project (700kb)</i>	 <i>Figure 1</i>	 <i>Figure 2</i>
Rating/Level	Jabatan <i>Departments</i>	

* Borang ini perlu diisi oleh pelajar dan dihantar kepada penyelia/ penyelaras projek dalam bentuk hardcopy dan softcopy (borang LAMPIRAN J dan gambar hasil projek dalam format jpeg/bitmap) bersama laporan akhir dan hasil projek