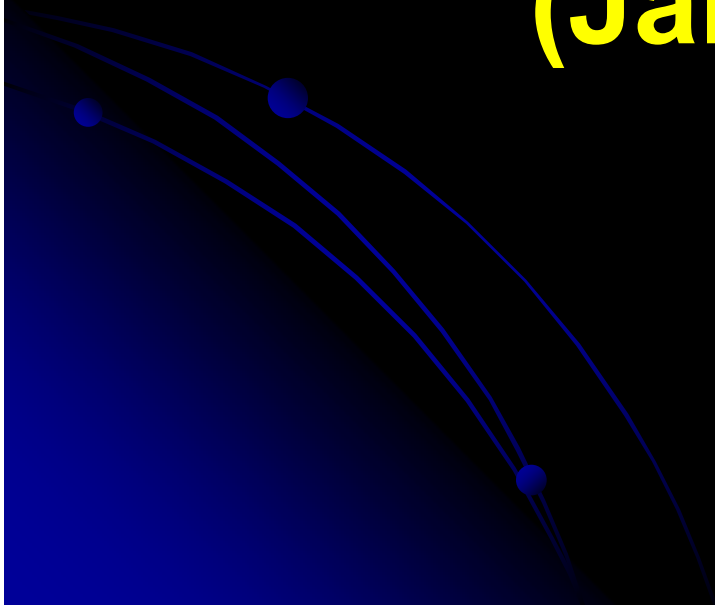


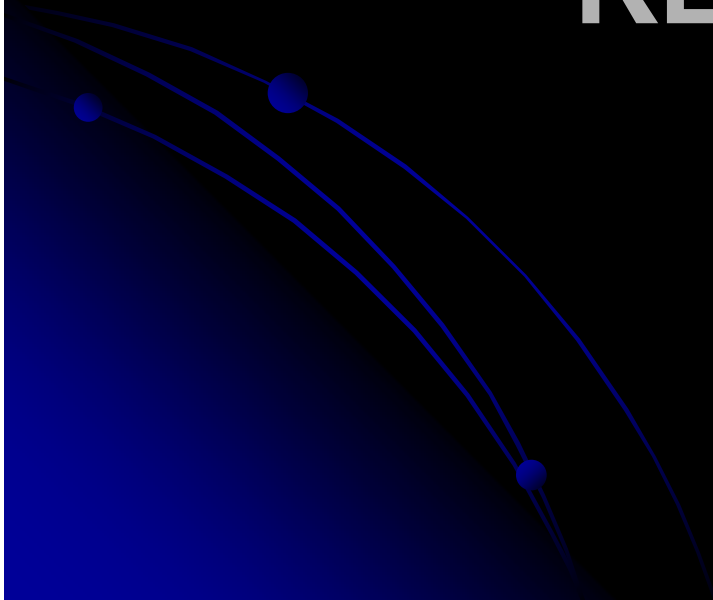
**LAPORAN PENYELIDIKAN &  
SISWAZAH FSTP  
(Jan - DIS 2013)**



# KANDUNGAN

- Bidang Kepakaran
- Kemudahan Penyelidikan
- Geran Penyelidikan
- Penerbitan
- Anugerah Penyelidikan
- MoU/MoA/Collaboration
- Profesor / Industri Pelawat
- Penganjuran Seminar
- Pasca Siswazah

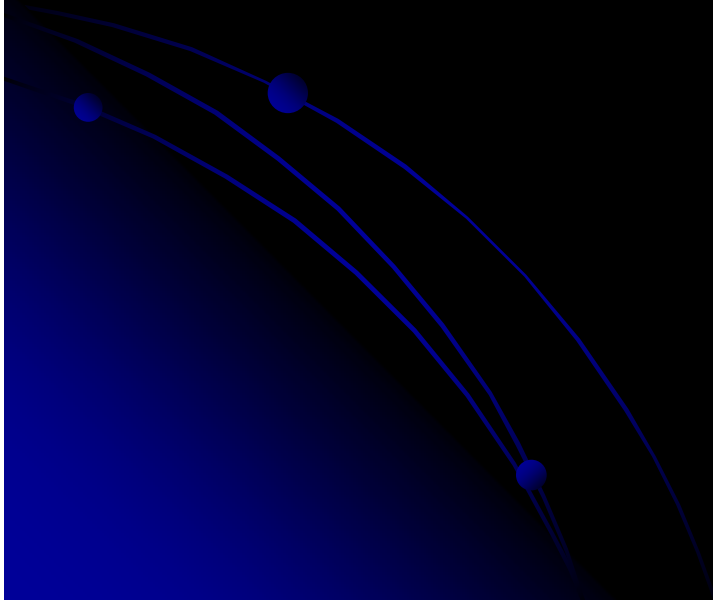
# BIDANG PENYELIDIKAN / KEPAKARAN



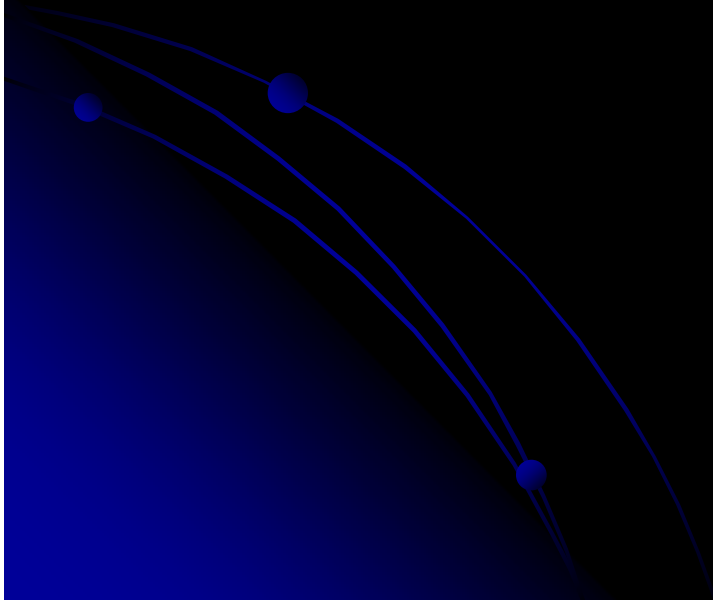
- Cyber Security (Information Security, Malware, Cryptography, Network security, Digital Forensic, etc)
- Computer Science (AI, Data Mining, programming etc)
- Vision Intelligence Systems
- Machine Learning, Mobile Agents etc
- Microbial Biotechnology
- Maritime Technology
- Electrochemical Power Sources
- Computational Materials Science
- Polymer Chemistry
- Nanotechnology
- Nuclear Physics
- Statistic

# Future:

- **Simulation**
- **Visualization**



# KEMUDAHAN PENYELIDIKAN

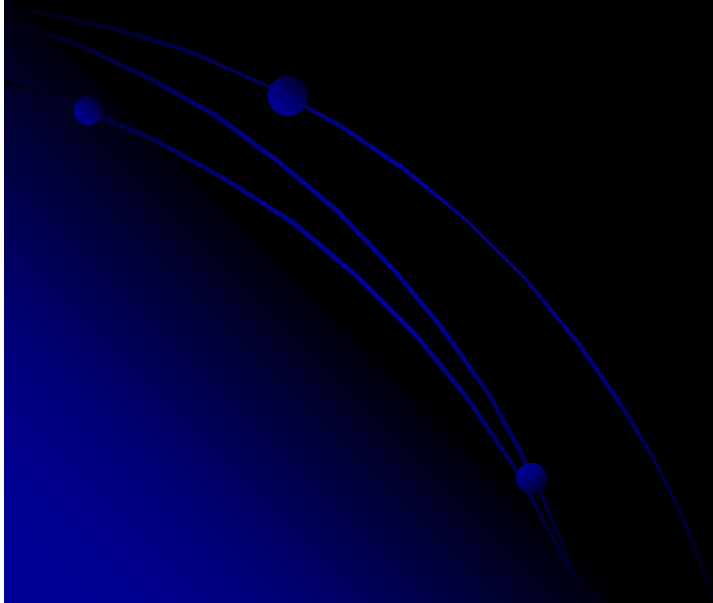


- Computer Application Lab
- Artificial Intelligence Lab
- Computer Security Lab
- Computer Science Research Lab
- Ship Simulator
- CBT For Communication and Tactical Lab
- Applied Physics & Advanced Materials Lab
- Applied Chemistry & Forensic Lab
- Biotechnology & Food Security Lab

### Future

- Simulation & Visualization Lab (Network Security)
- Networking Lab
- Software Engineering Lab

# GERAN PENYELIDIKAN





# Bilangan Geran Penyelidikan - TAMAT

Bil					
	Ketua Penyelidik (PI)	Geran	TEMPOH	JUMLAH	STATUS
1.	Dr. Noor Azilah Binti Mohd Kasim	FRGS (Sains Tulen)	Jan10 – Jan12	RM50,000	TAMAT
2.	Dr. Noor Azilah Binti Mohd Kasim	FRGS (Teknologi & Kejuteraan)	Aug10 – Aug12	RM50,000	TAMAT
<b>JUMLAH KESELURUHAN :</b>				<b>RM100,000</b>	

# Bilangan Geran Penyelidikan - TAMAT

Bil	TAHUN 2010				
	Ketua Penyelidik (PI)	Geran	TEMPOH	JUMLAH	STATUS
1.	PM Kapt Syed Nasir AISagoff Syed Zakaria	Science Fund (Teknologi)	Jun10 – Jun11	RM73,600	TAMAT
2.	PM Kept Zulkify Mat Radzi	FRGS (Sains Gunaan)	Feb10 – Sep12	RM11,000	TAMAT
3.	PM Kapt Syed Nasir AISagoff Syed Zakaria	FRGS (Sains Komputer)	Dis10 – Okt12	RM66,000	TAMAT
<b>JUMLAH KESELURUHAN :</b>				<b>RM150,600</b>	

# Outcome – Tamat Geran

- Kapt Syed Nasir (2010-2012)
  - 2 x Masters (ongoing)
  - 1 x IP
  - 3 x Proceeding
  - 1 x Commercial Product (3X MOA)
  - 3 Bronze
  - 2 Silver
  - 3 x Gold
  - 4 x Best Award
  - 1 x Merit Award
  - 1 x Special Award

# Bilangan Geran Penyelidikan – Sedang Maju

Bil	TAHUN 2011				
	Ketua Penyelidik (PI)	Geran	TEMPOH	JUMLAH	STATUS
1.	PM Kapt Syed Nasir AlSagoff Syed Zakaria	ERGS (Teknologi Pertahanan)	Jun11– Jun13	RM77,545	SEDANG MAJU (Lanjut tempoh)
<b>JUMLAH KESELURUHAN :</b>				<b>RM77,545</b>	

Bil	TAHUN 2012				
	Ketua Penyelidik (PI)	Geran	TEMPOH	JUMLAH	STATUS
1.	Prof Dr Abdul Ghapor Hussin	FRGS (Sains Tulen)	Jun12 – Jun15	RM112,000	SEDANG MAJU
2.	Prof Dr Muhd Zu Azhan Yahya	ERGS (Sains Bahan)	Jul12 – Jul15	RM89,000	SEDANG MAJU
3.	PM Kapt Syed Nasir AlSagoff Syed Zakaria	PRGS (Tek Komunikasi & Informasi)	Jun12 – Jun14	RM234,000	SEDANG MAJU
4.	PM Dr Omar Zakaria	KTP (Komuniti)	Jun12 – Jun13	RM51,819	SEDANG MAJU (Lanjut tempoh)
5.	Prof Dr Muhd Zu Azhan Yahya	MOSTI - NanoTech	Okt11 – Nov14	RM32,000	SEDANG MAJU
6.	PM Kapt Syed Nasir AlSagoff Syed Zakaria	KTP-Flagship	Sep12 – Mac14	RM83,000	SEDANG MAJU
7.	Dr Mohd Afizi Mohd Shukran	RACE – Keselamatan Siber	Nov12 – Nov14	RM50,000	SEDANG MAJU
8.	PM Dr Omar Zakaria	RACE – Keselamatan Siber	Nov12 – Nov14	RM47,500	SEDANG MAJU
9.	Lt Kdr Mohd Najib Abd Ghani Yolhamid	RAGS - Sains Bahan	Jan13-Dis14	RM30,000	SEDANG MAJU
10.	Dr Noor Azilah Mohd Kassim	RAGS- Kimia	Jan13-Dis14	RM30,000	SEDANG MAJU
11.	Siti Rohaidah Ahmad	RAGS - Sains Komputer	Jan13-Dis14	RM30,000	SEDANG MAJU
12.	Lt Muhamad Lazim Talib	RAGS – Teknologi Komunikasi & Informasi	Jan13-Dis14	RM30,000	SEDANG MAJU
<b>JUMLAH KESELURUHAN :</b>				<b>RM819,319</b>	

Bil	TAHUN 2013			
	Ketua Penyelidik (PI)	Geran	TEMPOH	JUMLAH
1.	Prof Dr Muhd Zu Azhan Yahya	FRGS (Sains Tulen)	Apr13 – Mac15	RM89,000
2.	Dr. Noor Azilah Binti Mohd Kasim	FRGS (Sains Gunaan)	Apr13 – Mac15	RM70,000
3.	Dr Nanthini Sridewi A/P Appan	FRGS (Sains Gunaan)	Apr13 – Mac15	RM79,127
4.	Mohd Najib Abdul Ghani Yolhamid	ERGS (STWN)	Jun13 – Jun 15	RM75,000
5.	Mohd Azzeri Md Naem	ERGS(PK)	Jun13 – Jun 15	RM76,000
6.	Dr Amalina Farhi Ahmad Fadzlah	ERGS (ICT)	Jun13 – Jun 15	RM79,127
7.	MOHAMAD ABU UBAIDAH AMIR BIN ABU ZARIM	RAGS	Sep 13 – Sep 15	RM71,000
8.	HARDY AZMIR BIN ANUAR	RAGS	Sep 13 – Sep 15	RM60,000
9.	KAMARUZAMAN BIN MASKAT	RAGS	Sep 13 – Sep 15	RM60,000
10.	PM Dr Omar Zakaria	FRGS	Dis 13 – Nov 15	RM76,000
11.	PM Dr Omar Zakaria	NRGS	Dis 13 – Dis 18	RM981,940
<b>JUMLAH KESELURUHAN :</b>				<b>RM1,867,194</b>

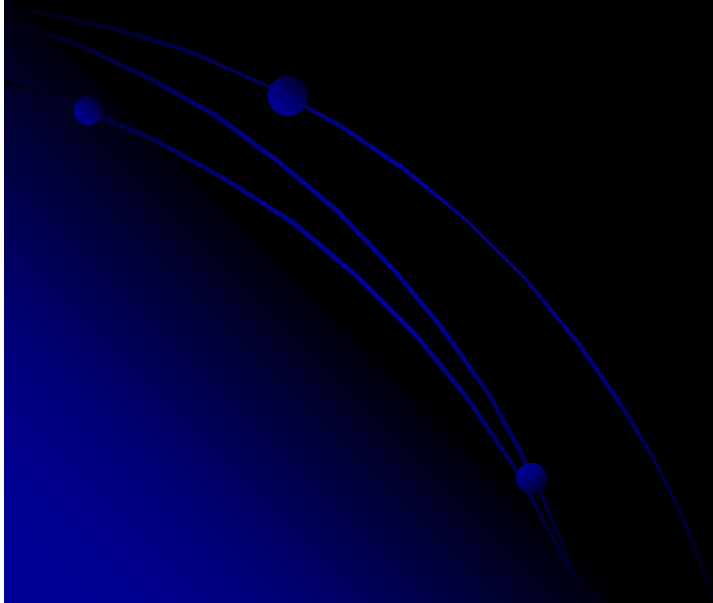
# Analisis Grant Yang Di Terima

	2010	2011	2012	2013	2014
Penerimaan Grant	5	1	12	14	16



Sasaran

# PENERBITAN





## Antara penulis yang aktif menerbitkan artikel – Berdasarkan SCOPUS

NAMA	BIL Penerbitan	Tahun 2013	Tahun 2012	H Index	Citation
Abdul Ghapor Hussin	27	6	7	2	24
Muhd Zu Azhan Yahya	86	11	27	11	436
Noordin Ibrahim	33	6	5	3	103
Wan Md Zin Wan Yunus	147	12	17	18	1389
Omar Zakaria	27	1	4	5	67
Mohd Afizi Mohd Shukran	25	1	12	3	18
Mohd Nazri Ismail	20	2	1	2	13
Puteri Nor Elyza Nohudin	9	1	3	2	13
S. Nasir Al Sagoff	8	2	0	1	3
Nor Azilah Mohd Kasim	9	-	2	2	15
Suzaimah Ramli	8	1	3	1	5

# Jumlah Tahun Penerbitan - SCOPUS

	2012	2013	2014
Jumlah Jurnal	81	42	45



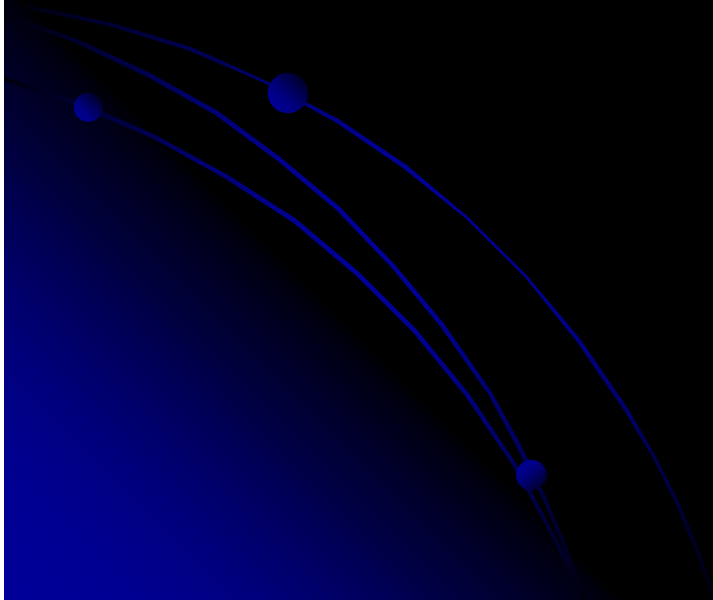
**Sasaran**

# Prosiding - Antarabangsa

NAMA	BIL	Tahun 2013
Suzaimah Ramli + Norulzahrah	3	3
Mohd Nazri Ismail	3	3
Mohamad Abu Ubaidah Amir	2	2
		10

**SASARAN 2014 = 13 prosiding**

# ANUGERAH REKACIPTA (2013)



## PM Kapt Syed Nasir Alsagoff Syed Zakaria

<p>Malaysia Technology Expo 2013</p>	<p>SUFIBAS 2.0: SUSPICIOUS FILE BEHAVIOUR ANALYSIS SYSTEM</p> <p>LIWANMS: LIGHT WEIGHT ANDROID NETWORK MONITORING SYSTEM</p> <p>SARTAMS: SEARCH AND RESCUE TACTICAL MANAGEMENT SYSTEM 4.0</p> <p>NOVEL METHOD OF FALL DETECTION USING ANDROID PHONE ACCELEROMETER AND ORIENTATION.</p> <p>PCMOTE: ANDROID PHONE AS PC GAME MOTION CONTROLLER.</p> <p>NOVEL METHOD OF INDOOR LOCATION DETERMINATION USING 3D REVERSE TRIANGULATION</p>	<p>2013</p>	<p>Bronze Medal</p> <p>Bronze Medal</p> <p>Silver Medal</p> <p>Silver Medal</p> <p>Silver Medal</p> <p>Gold Medal Special Jury Award RM500</p> <p>Most number of entry for individual inventor – 6</p> <p>Most number of medals for individual inventor – 6</p> <p>100% track record</p>
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<p>4th International Engineering Invention &amp; Innovation Exhibition 2013(i-ENVEX 2013)</p>	<p>SUTACSICS 2.0 SMALL UNIT SILENT TACTICAL COMMUNICATION SYSYEM</p> <p><u>Supervisor</u>  (P KDT Mohamad Redha Syamim Bin Saaris (3012574))  (P KDT Dafiqah Binti Mior Rayman (3013130))  (P KDT Sharifah Noor Fadzleen Shafinaz Binti Syed Mohamad Fauzie (3013166))</p> <p>T-PAD : A NOVEL METHOD OF NETWORK TRAFFIC PADDING UTILIZING DUAL FLOW</p>	<p>2013</p>	<p>Gold Medal Korean Invention Association Special Award</p> <p>Gold Medal</p>
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	<p>METHOD TO PREVENT TRAFFIC ANALYSIS</p> <p><u>Supervisor</u>  (P KDT Ahmad Hayatta Bin Razali (3012534))  (P KDT Wan Nurhidayat Bin Wan Muhamad (3012685))  (P KDT Mohamad Hisyam Bin Shahrudin (3012571))</p>		<p>100% track record.</p>
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Novel Research and Innovation Competition (NRIC 2013)	SUTACSICS 2.0 SMALL UNIT SILENT TACTICAL COMMUNICATION SYSYEM  <u>Supervisor</u> (P KDT Amir Ariffudin Bin Aminullah (375074)) (PKDT Mohd Arif Bin Hasan Albakri (375101)) Kaavitrajothi A/P Selvakumar	2013	Bronze Medal
	MACOMS - MALAYSIAN ARMY COLLABORATIVE MAPPING SYSTEM  <u>Supervisor</u> Koong De Kai (PKDT Muhammad Hazim Bin Alias (3013416)) (PKDT Thrimeshalla A/P Ravindran (375158))		Bronze Medal
			100% track record

<p>International Conference On Informatics And Creative Multimedia 2013 (ICICM'13)</p>	<p>MACOMS - MALAYSIAN ARMY COLLABORATIVE MAPPING SYSTEM</p> <p><u>Supervisor</u>  Nur Shamimi Binti Che Anuar  Nor Wahidah Binte Zailan  Siti Nur Alidda Bt Mohd Ghazali</p>	<p>2013</p>	<p>Silver Medal</p>
	<p>T-PAD : A NOVEL METHOD OF NETWORK TRAFFIC PADDING UTILIZING DUAL FLOW METHOD TO PREVENT TRAFFIC ANALYSIS</p> <p><u>Supervisor</u>  Fatim Farhana Binti Abd</p>		<p>Silver Medal</p>



MSC Malaysia APICTA Awards 2013	SARTAMS: SEARCH AND RESCUE TACTICAL MANAGEMENT SYSTEM 5.0		Finalist – Best of E Best of e- Government & Services  Merit Award – Best of e- Government & Services
Malaysian Innovation Expo 2013 (MIEXPO 2013)	MACOMS - MALAYSIAN ARMY COLLABORATIVE MAPPING SYSTEM  T-PAD : A NOVEL METHOD OF NETWORK TRAFFIC PADDING UTILIZING DUAL FLOW METHOD TO PREVENT TRAFFIC ANALYSIS		Gold Medal  Gold Medal  100% track record
3rd NEF-AWANI ICT Awards 2013	SARTAMS: SEARCH AND RESCUE TACTICAL MANAGEMENT SYSTEM 5.0		Finalist Best Software  Finalist Best Mobile & New Media Content / Application
PECIPTA 2013	SARTAMS: SEARCH AND RESCUE TACTICAL MANAGEMENT SYSTEM 5.0		Gold Medal  World Invention Property Association Special Award – Honor of Invention  The First PECIPTA Gold Medal for UPNM

# Dr Mohd Afizi Mohd Shukran

<b>International Exposition Research &amp; Innovation in Education (Edu-InERI 2013)</b>	<b>PQR Tag Scanner</b>	<b>Silver Medal</b>
	<b>Warning System Based on Movement Detection</b>	<b>Silver Medal</b>
	<b>Profile Storage System for Enforcement Officer Using Data Hiding Techniques in Steganography</b>	<b>Bronze Medal</b>
	<b>Smart Education System</b>	<b>Bronze Medal</b>
<b>Pecipta 2013</b>	<b>Pixel Value Access Control</b>	<b>Bronze Medal</b>

# Dr Suzaimah

<b>Pecipta 2013</b>	Image Analysis Method for Collecting Breastfeeding Anthropometry Data  Ergonomic improvement on baby support pillow for breastfeeding during travelling	<b>Bronze Medal</b>  <b>Silver Medal</b>



# Analisis Anugerah RekaCipta

	2012	2013	2014
Anugerah	8	27	30



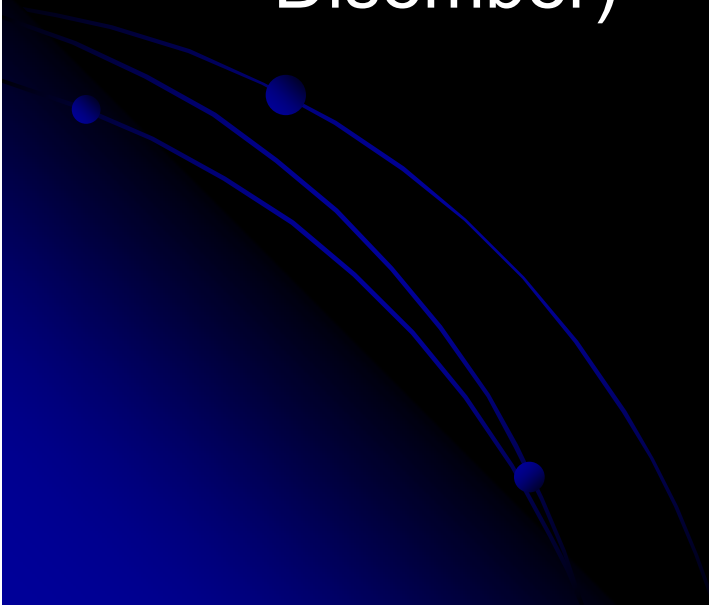
**Sasaran**

# Anugerah Terulung

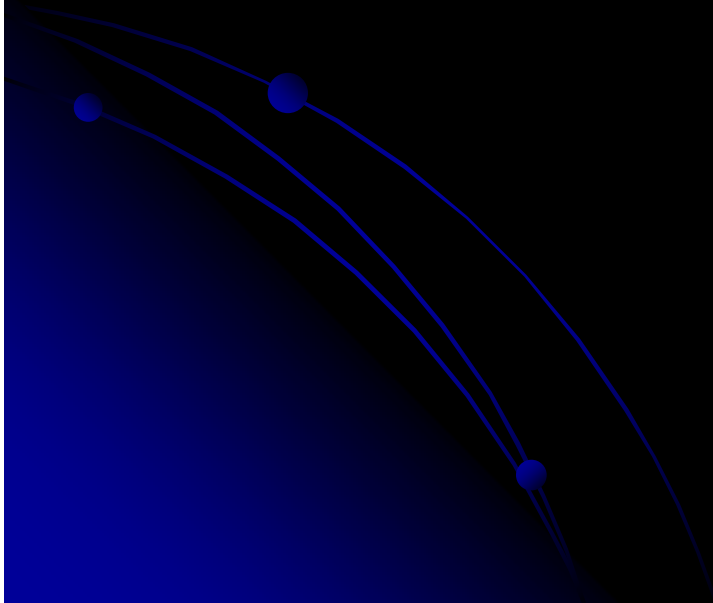
- PM Dr. Omar Zakaria
  - Chief Security Officer (CSO) Award, 07 Okt 2013
  - Pihak International Data Group (IDG) ASEAN & Vietnam - Award bagi peringkat ASEAN

# Anugerah Terulung

- PM Kapt Sayed Nasir Alsagoff
  - Anugerah di Korea Inventor Award Festival (7 Disember) dan ICT NEF Awani ke-3 (20 Disember)



# HARTA INTELEK

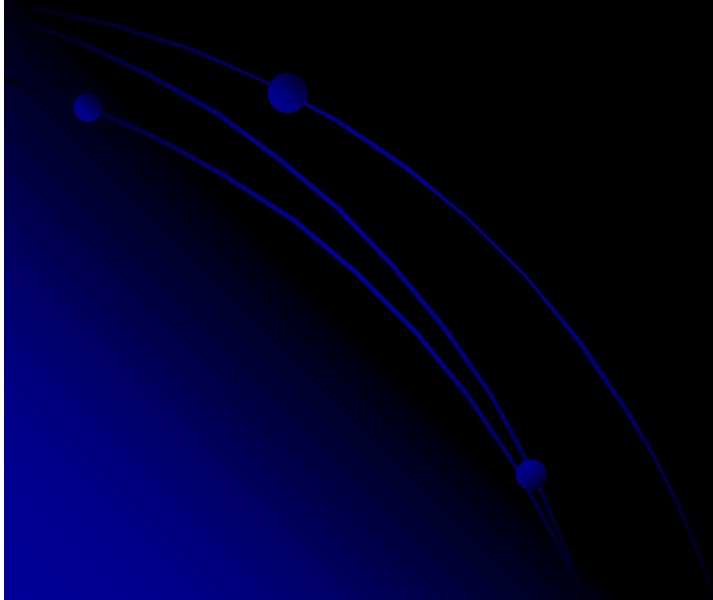


- **Nama Produk:** A System and Method for Search and Rescue (SARTAMS)
- **Nama Penyelidik:** PM Kapt Syed Nasir Alsagoff Syed Zakaria
- **Status:** Telah Terima No Paten  
PI 2011001337 (*Pending*)

- **Nama Produk:** Pixel Value Access Control
- **Nama Penyelidik:** Dr Mohd Afizi Mohd Shukran
- **Status:** Telah Terima No Paten  
PI 2013003261 (*Pending*)



# MoU / MoA / Jalinan Kerjasama



- Myung Info Tech Co Ltd – Korea
- Cyber Security Malaysia
- STRIDE
- Innergia Sdn Bhd – Perisian Komputer
- Cisco Network Academy
- IBM
- Prestariang Sdn Bhd
- Teknologi Park Malaysia (TPM)
- MIMOS
- Universiti Malaya

MOA signed with System Consultancy Services Sdn Bhd on 15 May 2013.

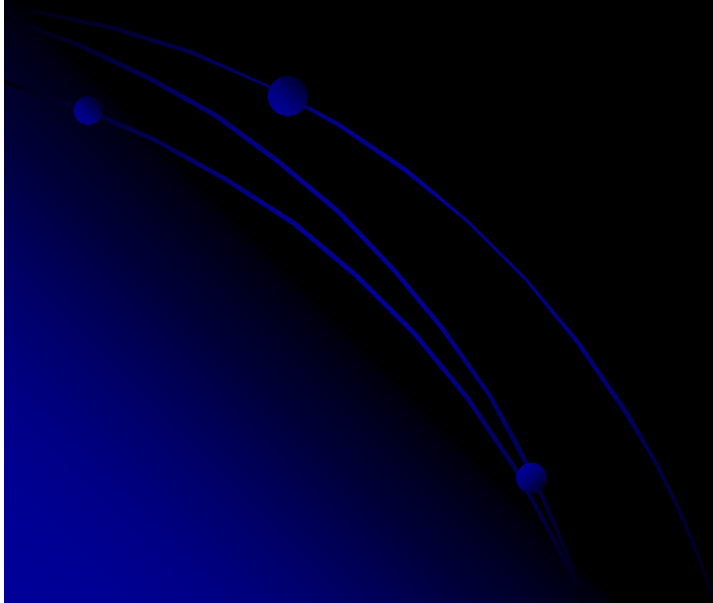
MOA signed with Pulsar UAV Sdn Bhd on 1 August 2013.

MOA signed with Landasan Teknologi Sdn Bhd on 1 August 2013.

MOU signed with Terato Tech Sdn Bhd on 1 August 2013.

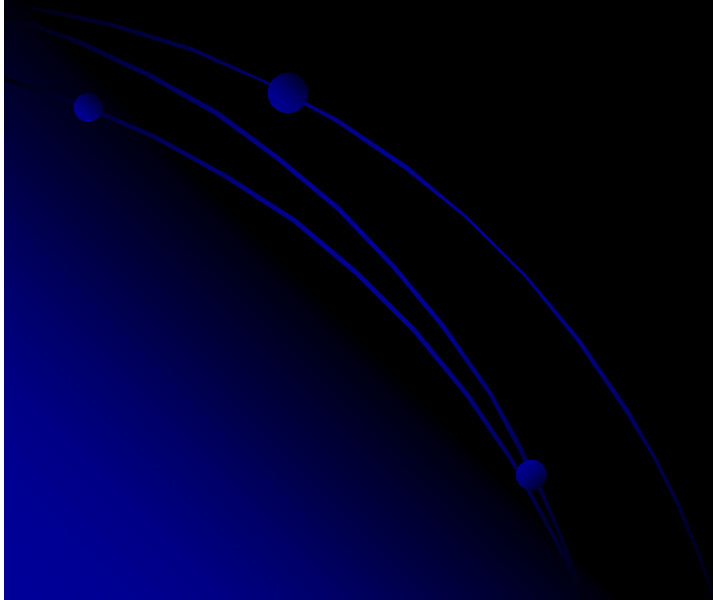
- MOU signed with **IMPRESSIVE COMMUNICATIONS SDN. BHD** – June 2014
- MOU signed with **INNERGIA GROUP INTERNATIONAL SDN. BHD.** – June 2014
- MOU signed with **AMAX PRECISION OPTIC SDN. BHD.** – June 2014

# PROFESOR / INDUSTRI PELAWAT



- Professor Dr S.A. Hashmi – Delhi University, India ( 04-05 Jun 2013)
  - Professor Kim, Korea University (Mei 2013)
  - Dr Solahuddin, Cyber Security Malaysia (07 Okt 2013)
- 

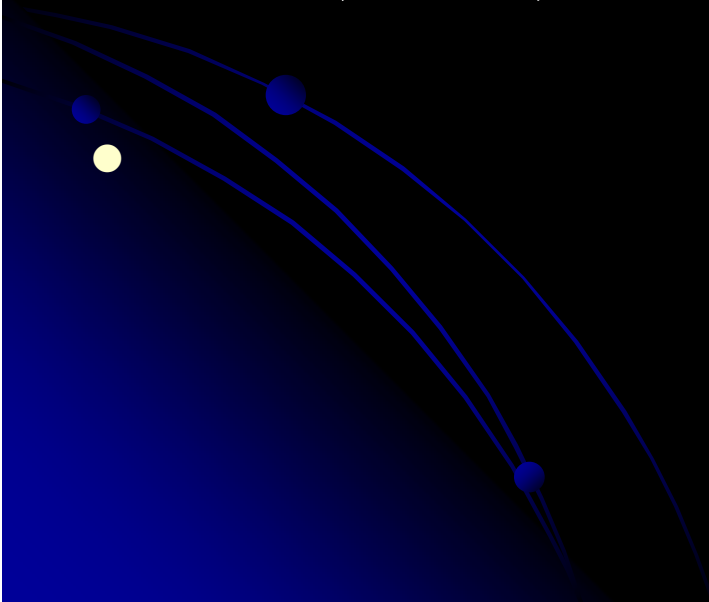
# PENGANJURAN SEMINAR (2013)



- **Seminar & Workshop on Energy Storage & Devices (04 – 05 Jun 2013)**

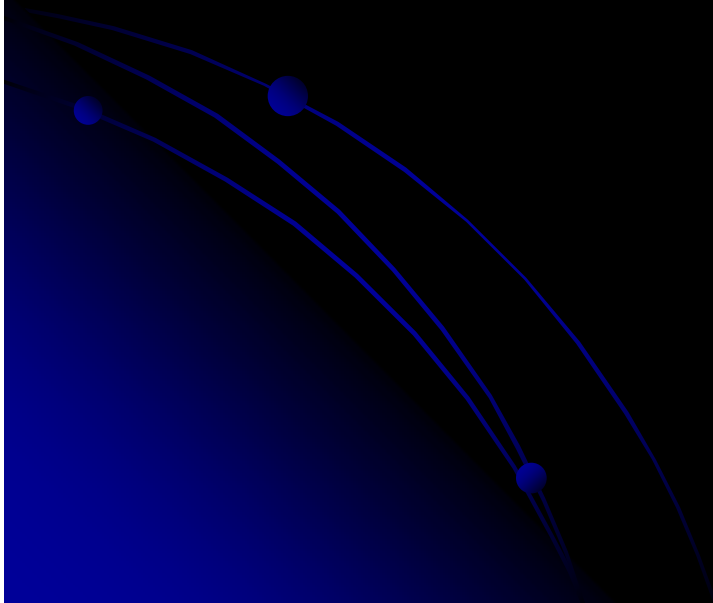
- Bertempat di Pusat Marin

- Jumlah peserta 60 orang (UPNM, UiTM, UM, UIA, UTeM, USIM, SIRIM, Magna Value Sdn Bhd)





# PASCA SISWAZAH FSTP



# PROGRAM SARJANA

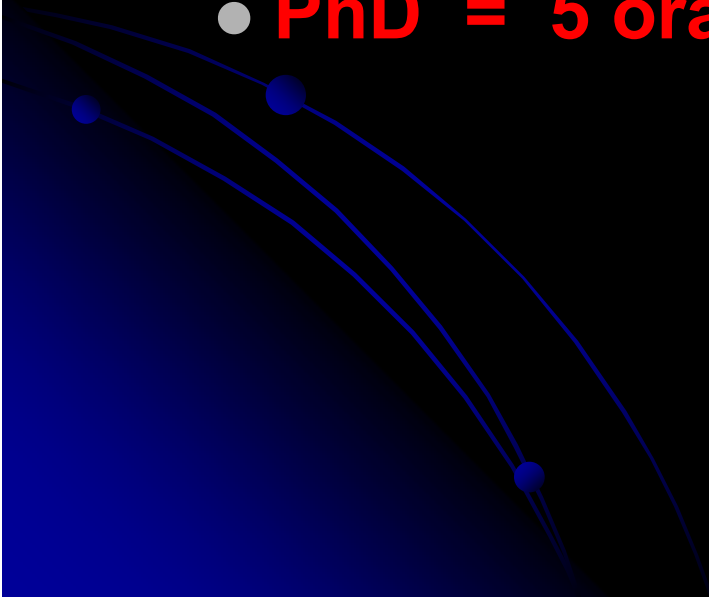
BIL.	BILANGAN KEMASUKAN PROGRAM SARJANA					
	PROGRAM	2010	2011	2012	2013	JUMLAH
1.	Tek. Maritim	1	-	1	1	3
2.	Kimia	-	1	1	2	4
3.	Sains Komputer	-	5	4	3	12
4.	Fizik	-	3	-	3	6
5.	Tek. Pertahanan	1	1	2	4	8
6.	Statistik	-	-	1	-	1
7.	Sains Kejurulatihan	-	-	1	-	1
	<b>JUMLAH</b>	<b>2</b>	<b>10</b>	<b>10</b>	<b>13</b>	<b>35</b>

# PROGRAM DOKTOR FALSAFAH

BIL.	BILANGAN KEMASUKAN PROGRAM DOKTOR FALSAFAH						
	PROGRAM	2008	2010	2011	2012	2013	JUMLAH
1.	Tek. Maritim	-	-	-	-	-	-
2.	Kimia	-	-	-	1	1	2
3.	Sains Komputer	-	-	2	-	2	4
4.	Fizik	-	-	2	2	3	7
5.	Tek. Pertahanan	2	-	-	1	2	5
6.	Statistik	-	-	-	-	1	1
7.	Sains Sukan	-	-	-	-	2	2
	<b>JUMLAH</b>	<b>2</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>11</b>	<b>21</b>

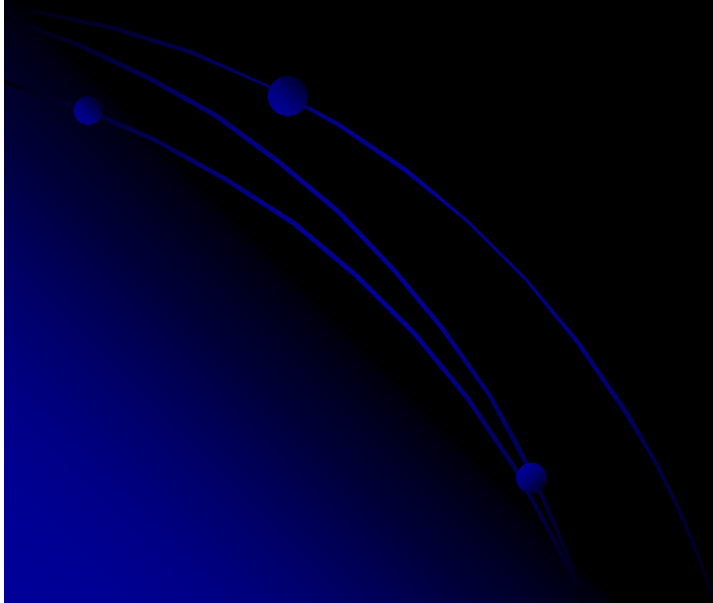
# Sasaran Pasca Siswazah 2014

- Berdasarkan kepada unjuran, sasaran pelajar pasca siswazah ialah:
  - **Master = 8 orang (min)**
  - **PhD = 5 orang (Min)**



# Aktiviti

## Jan – Feb 2014



## Program Latihan Sijil Profesional (industry Base) oleh Prestariang Sdn Bhd

-Tarikh 4 Feb – 12 Feb 2014

- Certified Ethical Hackers (CEH) - 8 orang lulus / 27 peserta
- Ec-Council Network Security Administrator (ENSA) - 25 lulus / 28 peserta
- Prince 2 (project management) – 7 lulus / 27 peserta

-

## Kolokium Berkala FSTP

- Tarikh 19 Feb 2014

- Bertempat di Pusat Marin

- Peserta: Staf FSTP, UPNM, STRIDE, MINDEF,

- 18 peserta membentangkan kertas kerja, 8 peserta menghantar kertas kerja penuh.

- Kertas kerja penuh ini akan dipertimbangkan untuk dimasukkan ke dalam jurnal Zulfakar UPNM

# Aktiviti Seterusnya

- 27 Feb 2014, ceramah berkenaan “How to write a good research grants”
- MTE 2014 : 20 – 21 Feb, 4 Kumpulan terlibat yang diketuai oleh: PM Kapt Sayed, Dr. Mohd Afizi, PM Dr. Suzaimah & Prof. Dr. Zu (lebih daripada 10 produk dipamerkan oleh FSTP)

# Keputusan MTE 2014

- Prof Dr. Zu : **1 Silver**
- Dr. Mohd Afizi: **1 Bronze**
- PM Dr. Suzaimah: **1 Bronze**
- PM Kapt Sayed Nasir: **4 Gold, 2 Silver, 1 Bronze**
- LONG RANGE NLOS DATA COMMUNICATION UTILIZING COMBINATION OF 2.4GHZ AND 900MHZ BAND (**MTE 2014 Best Award; Croatia Award**)

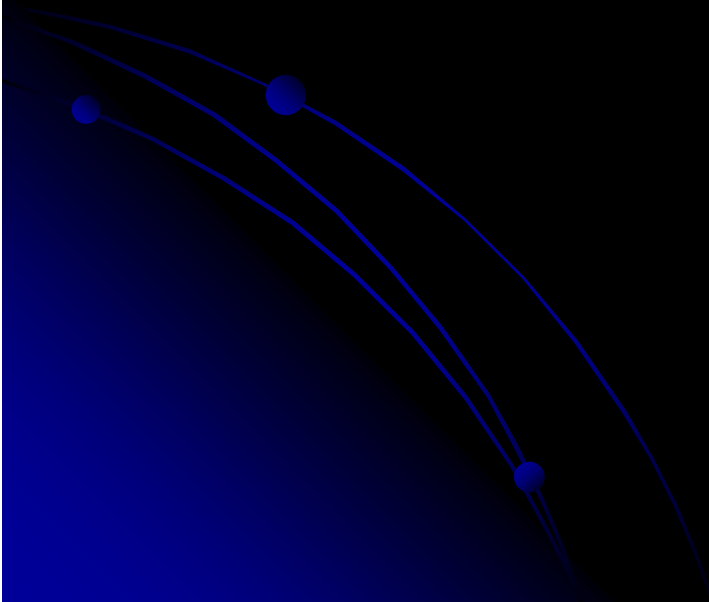


# Aktiviti Akan Datang - 2014

- Pertandingan seterusnya yang boleh disertai ialah:
  - i-ENVEX (April) – pengesahan 3 produk FSTP
  - ITEX (May)
  - NRIC (June)
  - PECIPTA (Okt/Sept)
  - i-IDeA (Sept)

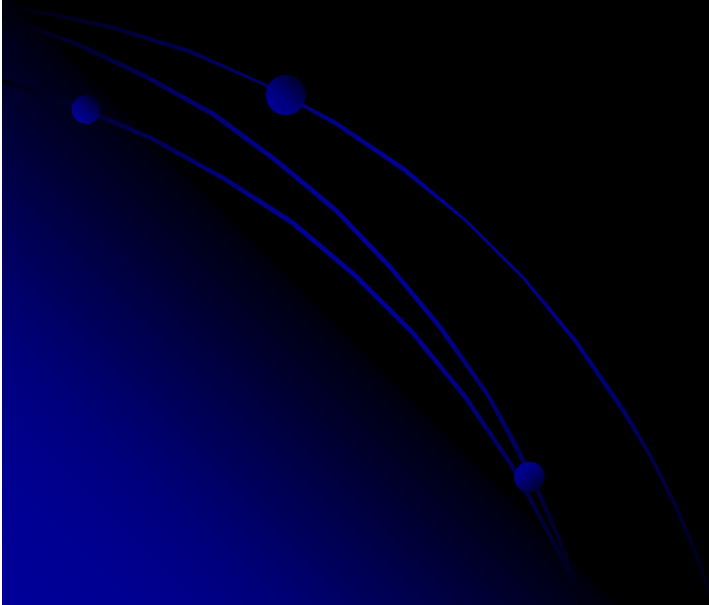
## i-ENVEX (April)

- PM Kapt Syed Nasir – 2 Gold, 1 Gangsa
- Dr. Afizi – 1 silver, 2 gangsa



# iidex 2014 - UiTM

- Dr. Afizi – 1 Gold; 1 Bronze



# Aktiviti Akan Datang - 2014

- Ceramah yang dicadangkan, fokus kepada pelajar siswazah FSTP:
  - “Penulisan tesis yang efektif dan berkesan”
  - “Bagaimana untuk menulis jurnal dan prosiding yang baik dan efektif”

# Prosiding 2014

- Prof Ghapor -1+1
- Dr. Amalina – 1
- Abu – 1+1
- Fizi – 3
- Kz – 1
- Dr. Puteri - 1

# Prof Ghapor

- 12th International Conference of Statistical Science

Tempat: Karachi Pakistan

Tajuk: Outlier detection and robust nonparametric approach in linear structural relationship model

Peranan: Keynote speaker

Tarikh: 24-26 March 2014

- Maka, UTM telah dilantik selaku peneraju cluster bagi UPNM. UPNM telah mewujudkan 2 bidang cluster dibawah FSTP iaitu:

- 

- Teknologi Maritim (Leader: Dr. Nathini)

- Sub-Kluster

- Pengangkutan Maritim

- Kejuruteraan Maritim

- Sistem Pensenjataan

- Maritim

- Logistik Maritim

- Keselamatan Maritim

- Keamanan Maritim

- 

- ICT (Leader: Dr. Nazri)

- Sub Kluster

- Keselamatan Maklumat

- Kepintaran Buatan

- Aplikasi Mobil

# Projek bersama UTM

BIL	NAMA RESEARCH GROUP (RG)	SENARAI NAMA AHLI KUMPULAN RG	BIDANG KEPAKARAN YANG DIMILIKI	BIDANG KEPAKARAN YANG DIPERLUKAN DARI UTM
		Mohamad Abu Ubaidah Amir Bin Abu Zarim	Naval Architecture & Marine Engineer	Naval Architecture & Marine Engineer

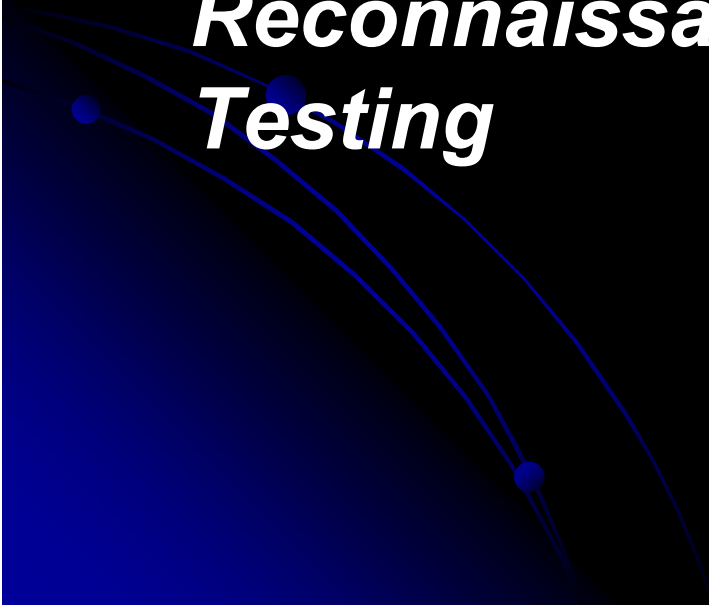
BIL	JENIS AKTIVITI/PROJEK	TARIKH/MASA	TEMPAT AKTIVITI	BILANGAN STAF TERLIBAT	ANGGARAN KOS DIPERLUKAN	OUTPUT AKTIVITI/PROJEK
1	Latihan Flume wave maker		UTM			Memiliki kemahiran dalam mengendalikan flume wave maker
2	Latihan AutoCad (intermediate/advance)		UTM			Memiliki kemahiran AutoCad di peringkat lebih tinggi
3	Latihan Ansys/CFD analysis		UTM			Memiliki kemahiran menganalisa menggunakan CFD
4	Latihan solidwork		UTM			Memiliki kemahiran menggunakan Solidwork



# Hal-Hal Lain

- Akan mewujudkan laman Intranet bagi kegunaan warga FSTP dan akan memuatkan maklumat /informasi berkenaan “postgraduate” dan “undergraduate”
- Laman web intranet ini juga akan diaktifkan dengan penggunaan FTP, dimana maklumat pembelajaran boleh di simpan dan di muat turun dari ‘server’.

# Talk 2014

- *How to write a good research grant (Prof Zaharin – Feb)*
  - ***CYBER SECURITY LECTURE SERIES 1***
  - - (Hazali): April - ***Conducting Cyber Reconnaissance in a Penetration Testing***
- 

TAMAT

Q & A

