



**PRO** Professional Academy

# PROFESSIONAL ACADEMY

DIGITAL TALENT SCHOLARSHIP TAHUN 2024

## SILABUS PELATIHAN

### MALWARE ANALYSIS

#### MITRA PELATIHAN



Informasi Pelatihan dan Sertifikat				
Akademi	Professional Academy			
Mitra Pelatihan	<b>IdCARE.UI</b>			
Nama Pelatihan	<b>Case Study and Practice : Malware Analysis</b>			
Sertifikasi	<ul style="list-style-type: none"> <li>• Certificate of Completion by KOMINFO</li> <li>• Certificate of Completion by idCARE.UI</li> </ul>			
Durasi Pelatihan	5	Minggu		
Jam Pelatihan (1 JP = 45 Menit)	<table border="1" style="width: 100%;"> <tr> <td style="text-align: center;"><b>Total Jam Pelatihan</b></td> <td style="text-align: center;"><b>44 JP</b></td> </tr> </table>		<b>Total Jam Pelatihan</b>	<b>44 JP</b>
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Deskripsi Pelatihan	-			
Output Pelatihan	<ol style="list-style-type: none"> <li>1. Participants will be able to perceive malware analysis with open source.</li> <li>2. Able to analyze and recognize malware with basic analysis techniques, dynamic analysis techniques, and static analysis techniques.</li> </ol>			
Outcome				
Aktivitas Pelatihan	<p>Pelatihan dilaksanakan secara daring/<i>online</i>, peserta belajar secara mandiri (<i>Self-paced Learning</i>) melalui laptop/komputer. Pada pelatihan ini peserta akan mendapatkan kesempatan bertanya dan berinteraksi dengan Instruktur pada Grup Kelas dan Live Session yang telah disediakan. Untuk lulus di pelatihan ini peserta diharuskan melewati :</p> <ul style="list-style-type: none"> <li>• 5 Modul belajar</li> <li>• 1x Pre-test</li> <li>• 1x Post-test</li> </ul>			
Persyaratan Administrasi Peserta	<ol style="list-style-type: none"> <li>1. Warga Negara Indonesia dibuktikan dengan KTP/KK.</li> <li>2. Tidak sedang menempuh pendidikan SD, SMP (sederajat), SMA/SMK (Sederajat), D1, D2, D3, D4, S1 (sederajat). Bukan Pelajar/Mahasiswa.</li> <li>3. Sedang Bekerja di sektor swasta dan publik.</li> <li>4. Terbuka bagi peserta disabilitas. Bagi calon peserta penyandang disabilitas dapat mendaftar pelatihan dengan menyediakan sarana dan prasarana pendukung pelatihan secara mandiri.</li> <li>5. Investigator</li> <li>6. IT professional</li> </ol>			
Persyaratan Keterampilan atau Pengetahuan Dasar Peserta	<p>In this course, the handling of digital artifacts will be learned by analyzing cyber incidents and crimes involving computers so that <b>basic knowledge about computer systems, assembler and digital storage media is needed.</b></p>			
Persyaratan Sarana Peserta	<p>Memiliki laptop/komputer dengan spesifikasi minimal:</p> <ol style="list-style-type: none"> <li>1. <i>Operating System</i>: Microsoft Windows, Linux, atau MacOS</li> <li>2. RAM sebesar 2 GB RAM minimum (4 GB RAM direkomendasikan)</li> <li>3. Terdapat 1.5 GB ruang kosong pada penyimpanan</li> <li>4. Resolusi layar minimal 1024x768</li> </ol>			

Rencana Pelatihan			
No.	Topik	Output	JP
Topik 1	<b>Basic Analysis Techniques</b>	Able to build an isolated and controlled laboratory environment to analyze code and behaviour of malicious programs. Able to list up basic analysis techniques Able to explain basic flow of malware analysis	5

<b>Topik 2</b>	<b>Basic Static Analysis</b>	Able to use network and system monitoring tools for basic static analysis of how malware interacts with file systems, the registry, networks, and other processes in a Windows environment	<b>9</b>
<b>Topik 3</b>	<b>Basic Dynamic Analysis</b>	<ul style="list-style-type: none"> <li>• Able to reveal and do basic dynamic analysis of malicious JavaScript and other components of web pages, which are often used by exploit kits for drive-by attacks.</li> <li>• Able to control the relevant aspects of malicious program behaviour through network traffic interception.</li> </ul>	<b>10</b>
<b>Topik 4</b>	<b>Advance Static Analysis</b>	<ul style="list-style-type: none"> <li>• Able to explain techniques of malicious code analysis, code debugging, malware debugging, and kernel debugging.</li> <li>• Able to perform reverse engineering for malware analysis</li> <li>• Able to use disassemblers and debuggers to check how dangerous Windows executables work.</li> </ul>	<b>10</b>
<b>Topik 5</b>	<b>Self Defending Malware</b>	<ul style="list-style-type: none"> <li>• Able to explain various features/packages of self protected malware and other defence mechanisms designed by malware makers to direct, confuse, and slow down analysts.</li> <li>• Able to defend systems from various self protected malware/anti-malware</li> </ul>	<b>10</b>

