**MINISTRY OF EDUCATION, MALAYSIA**

**VOCATIONAL COLLEGE STANDARD CURRICULUM**

**COURSE INFORMATION**

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| **COURSE NAME** | **:** |  | **APPLICATION SYSTEM DOCUMENTATION COMPILATION** | |
| **CODE NAME** | **:** |  | **KPD4024** | |
| **LEVEL** | **:** |  | **3 SEMESTER 4** | |
| **CREDIT UNIT** | **:** |  | **4** | |
| **CONTACT HOUR** | **:** |  | **FACE TO FACE** | **: 6 HOURS/WEEK** |
|  |  |  | **NON FACE TO FACE** | **:** |
| **COURSE TYPE** | **:** |  | **VOCATIONAL** | |
| **PREREQUISITE**  **CORE REQUISITE** | **:**  **:** |  | **-**  **-** | |

**COURSE OUTCOMES**

At the end of the course, the students should be able to:-

The person who is competent in this CU shall be able to compile accurate information and documents according to application module and store the system documentation in source code repository. Upon completion of this CU trainee shall be able to:

* Interpret system documentation requirement
* Compile system documentation material
* Upload system documentation

**COURSE DESCRIPTION**

Application system documentation compilation is a process of collecting and arranging source code documents and user manual materials in good order.

The person who is competent in this CU shall be able to interpret system documentation requirement, compile system documentation and store system documentation.

The outcome of this competency is accurate information and well organized documents compiled according to application module. System documentation compiled are secured and kept safely in source code repository.

**CONTENT AND LEARNING STANDARDS**

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| **PROGRAM** | **:** | **TEKNOLOGI PENGURUSAN PANGKALAN DATA DAN APLIKASI WEB** |
| **COURSE NAME** | **:** | **APPLICATION SYSTEM DOCUMENTATION COMPILATION** |
| **CODE NAME** | **:** | **KPD 4024** |

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| **CONTACT HOURS**  **(TRAINING DURATION)** | **CONTENT STANDARD**  **(WORK ACTIVITIES)** | **LEARNING STANDARD**  **(RELATED KNOWLEDGE / APPLIED SKILLS / ATTITUDE / SAFETY / ENVIROMENTAL)** | **PERFORMANCE CRITERIA /**  **ASSESSMENT CRITERIA** |
| **30 HOURS**  **(6 WEEKS)**  Related Knowledge  (15 Hours)  3 Weeks  Applied Skills  (15 Hours)  3 Weeks | 1. **INTERPRET SYSTEM DOCUMENTATION REQUIREMENT** | **Related knowledge**   1. System documentation requirement 2. Source code documenter software 3. Types of system documentation such as:  * Unified Modelling Language (UML) * User manual * Source code manual * Data flow diagram * Entity relation diagram (ERD) * End User License Agreement (EULA)  1. Sample of user manual 2. Sample of source code manual 3. Company’s policy and guideline   **Applied Skills**   1. Identify application system documentation requirement 2. Obtain document template as per system documentation requirement 3. Refer company’s guideline for application system documentation   *Attitude:*   1. Proactive when interpreting bug report 2. Resourceful when interpreting bug report 3. Committed when interpreting bug report 4. Analytical thinking when interpreting bug report 5. Adhere to End User License Agreement (EULA)   *Safety/Environment*:  i. Adhere to workplace ergonomics practice | **Assessment Criteria**   1. System documentation requirement explained 2. Source code documenter software listed 3. Types of system documentation listed 4. Function of company’s policy and guideline explained 5. System documentation requirement confirmed   **Performance Criteria**   1. Application system documentation requirement identified according to job brief 2. Company’s guideline of application system documentation referred |

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| **45 HOURS**  **(9 WEEKS)**  Related Knowledge  (15 Hours)  3 Weeks  Applied Skills  (30 Hours)  6 Weeks | **2.0 COMPILE SYSTEM DOCUMENTATION MATERIAL** | **Related knowledge**   1. Source code documentation comment 2. Types of user manual resource such as:  * Screenshot image * Process flow diagram * Related article   **Applied Skills**   1. Write source code documentation comment 2. Generate source code documentation      1. Compile user manual resource 2. Organize user manual material   *Attitude:*   1. Proactive when compiling system documentation material 2. Resourceful when compiling system documentation material 3. Committed when compiling system documentation material 4. Analytical thinking when compiling system documentation material   *Safety/Environment*:   1. Adhere to workplace ergonomics practice | **Assessment Criteria**   1. Source code documentation syntax explained 2. Types of user manual resource listed 3. Source code syntax produced 4. Source code documentation produced 5. User manual resource and user manual material produced   **Performance Criteria**   * 1. Source code written according to company’s document control guideline   2. Source code documentation generated according to company’s document control guideline   3. User manual material (screenshot, menu) compiled according to company’s document control guideline   4. User manual material organized according to application module |

**CONTENT AND LEARNING STANDARDS**

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| **CONTACT HOURS**  **(TRAINING DURATION)** | **CONTENT STANDARD**  **(WORK ACTIVITIES)** | **LEARNING STANDARD**  **(RELATED KNOWLEDGE / APPLIED SKILLS / ATTITUDE / SAFETY / ENVIROMENTAL)** | **PERFORMANCE CRITERIA /**  **ASSESSMENT CRITERIA** |
| **10 HOURS**  **(2 WEEKS)**  Related Knowledge  (5 Hours)  1 Week  Applied Skills  (5 Hours)  1 Week | **3.0 UPLOAD SYSTEM DOCUMENTATION** | **Related knowledge**   1. Maintenance of source code such as:  * SCM * Version control  1. Source code distribution method such as:  * Pull * Push * Check out * Commit * Update   **Applied Skills**   1. Determine system documentation storage destination in source code repository 2. Upload system documentation to source code repository 3. Grant system documentation access to technical documentation writer   *Attitude:*   1. Proactive when uploading system documentation 2. Resourceful when uploading system documentation 3. Committed when uploading system documentation 4. Analytical thinking when uploading system documentation   *Safety/Environment*:   1. Adhere to workplace ergonomics practice | **Assessment Criteria**   1. Function of source code maintenance explained 2. Source code distribution method listed 3. System documentation transferred to source code repository   **Performance Criteria**   * 1. System documentation storage destination confirmed in source code repository   2. System documentation uploaded to source code repository   3. System documentation access granted to technical documentation writer |

**Employability Skills**

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| **Core Abilities** | | **Social Skills** |
| 01.01 Identify and gather information.  01.02 Document information procedures or processes.  01.03 Utilize basic IT applications.  02.01 Interpret and follow manuals, instructions and SOP's.  02.03 Communicate clearly.  02.04 Prepare brief reports and checklist using standard forms.  02.05 Read/Interpret flowcharts and pictorial information.  03.02 Demonstrate integrity and apply practical practices.  03.03 Accept responsibility for own work and work area.  03.04 Seek and act constructively upon feedback about work performance.  03.06 Respond appropriately to people and situations.  03.07 Resolve interpersonal conflicts.  06.01 Understand systems.  06.02 Comply with and follow chain of command.  06.03 Identify and highlight problems.  06.04 Adapt competencies to new situation systems.  01.04 Analyze information.  01.05 Utilize the Internet to locate and gather information.  01.06 Utilize word processor to process information.  02.07 Utilize Local Area Network (LAN)/Intranet to exchange information.  02.08 Prepare pictorial and graphic information.  03.08 Develop and maintain a cooperation within work group.  04.01 Organize own work activities.  04.02 Set and revise own objectives and goals.  04.03 Organize and maintain own workplace.  04.04 Apply problem solving strategies.  04.05 Demonstrate initiative and flexibility.  06.05 Analyze technical systems.  06.06 Monitor and correct performance of systems.  01.07 Utilize database applications to locate and process information.  01.08 Utilize spreadsheets applications to locate and process information.  01.10 Apply a variety of mathematical techniques.  01.11 Apply thinking skills and creativity.  02.09 Prepare flowcharts.  02.10 Prepare reports and instructions.  02.11 Convey information and ideas to people.  03.15 Liaise to achieve identified outcomes.  05.01 Implement project/work plans.  05.02 Inspect and monitor work done and/or in progress. | | 1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork |
| **Tools, Equipment and Materials (TEM)** | | |
| **ITEMS** | | **RATIO (TEM : Trainees)** |
| 1. Computer set 2. Internet connection 3. Source Code Management (SCM) software 4. IDE software 5. Software Development Kit (SDK) 6. Database Management System (DBMS) 7. Source code documenter software 8. Word processing software 9. Computer with server role 10. Stationeries 11. Sample of user manual 12. Sample of source code manual | | 1:1  As required  1:1  1:1  1:1  1:1  1:1  1:1  1:25  As required  1:1  1:1 |
| **Reference** | | |
| **REFERENCES** | | |
| 1. Roger S. Pressman, Bruce Maxim (2010) Software Engineering: A Practitioners Approach (6th edition), Mc Graw Hill Education, ISBN 978-0073375977 2. Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford (2010), Documenting Software Architectures: Views and Beyond (2nd Edition), Addison-Wesley Professional, ISBN 978-0321552686 3. Thomas T. Barker (2002), Writing Software Documentation: A Task-Oriented Approach (Part of the Allyn & Bacon Series in Technical Communication) (2nd Edition), Longman, ISBN 978-0321103284 4. Karl Wiegers, Joy Batty (2013), Software Requirements (3rd Edition) (Developer Best Practices), Microsoft Press, ISBN 978-0735679665 | | |

**Disediakan oleh:**

**KEMENTERIAN PENDIDIKAN MALAYSIA**

**OCT 2018**