(1)   **Kod Kursus:**   **KKKP3214**
        Course Code:

(2)   **Nama Kursus:**   **CAD/CAM**
        Course Title: *CAD/CAM*

(3)   **Taraf Kursus:**   **Jabatan (Wajib)**
        Course Definition: *Department (Compulsory)*

(4)   **Sinopsis:**
        Synopsis:

        Memberi pelajar pendedahan, pengetahuan, kefahaman dan sintesis kepada teori
        mengenai komputer grafik, penggunaan perisian CAD/CAM, keperluan perkakasan
        terhadap perisian tersebut. Komputer grafik dan permodelan akan meliputi teknik
        permodelan 2D dan 3D. Bermula dengan kerangka dawai sehingga permodelan
        padu. Kursus juga meliputi pertukaran data diantara sistem CAD/CAM yang
        berbeza (DXF, IGES, STEP), Kaedah unsur terhingga, perancangan pengeluaran
        terbantu komputer, kejuruteraan setemu, dan pembuatan terbantu komputer. Kursus
        juga memperkenalkan peraturcaraan untuk Kawalan Berangka Komputer (CNC).

        *Give students exposure, knowledge, understanding and synthesis of the theory of
        computer graphics, CAD/ CAM software, and the requirement for that software.
        Computer graphics and modeling which included 2D and 3D modeling techniques,
        starting from a wire frame to solid modeling. This course also covers the data
        exchange between different CAD / CAM systems (DXF, IGES, STEP), finite element
        methods, computer   aided production   planning, concurrent engineering, and
        computer   aided   manufacturing. This   course also
        introduces programming for Numerical Control Computer (CNC).*

(5)   **Pra-Keperluan:** Tiada/None
        Pre-requisite (if any):

(6)   **Bacaan Asas:**
        References:

        Rao P.N. , 2012, CAD/CAM Principles and Application, McGraw Hill International
        Edition.
        Ibrahim Zeid,2005, Mastering CAD/CAM, McGraw Hill International Edition.
        Kunwoo, L., 2002, Principles of CAD/CAM/CAE Systems, Massachusetts,
        Addison-Wesley.
        Chang T.C. et al, 2005, Computer-Aided Manufacturing, 3rd Edition, New York,
        Prentice Hall.
        Amirouche F.M, 2006, Principle Computer-Aided Design and Manufacturing, 3rd
        Edition, Prentice Hall