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| <b>Course Name</b>               | <b>Automobile Structure and Principle</b>  |
| <b>Course Director</b>           | Feng Ying, Gao Wei, Kang Yuanchun  |
| <b>Major</b>                     | Mechanical Engineering, Automotive Engineering   |
| <b>Objective</b>                 | The objective of this course is to let the students master the structures and principles of engine and chassis, and know the newest progress in automotive technology; The task of this course is to let the students master the primary automobile structures of home and abroad and gain the ability of analyzing other automobiles' structure, the movement, forces and performance of automobile and main components; This course also improves the students' language communication ability in special English. |
| <b>Semester</b>                  | 6th  |
| <b>Language</b>                  | English  |
| <b>Learning/Teaching methods</b> | Teach with the help of real components, drawings, videos and flash; Teach the students how to analyze the structure and principle; Make the students infer other things from one fact.   |
| <b>Hour</b>                      | 48h  |
| <b>Credit</b>                    | 4.0  |
| <b>Prerequisite</b>              | Mechanical Graphic, University Physics, Engineering Chemistry, Mechanics   |
| <b>Content</b>                   | <ol style="list-style-type: none"> <li>1. Overview(2h)</li> <li>2. Engine(19h)</li> <li>3. Power train(11h)</li> <li>4. Running gear system(6h)</li> <li>5. Steering system and braking system(6h)</li> <li>6. Newest technology of automobile(4h)</li> </ol>  |
| <b>Grade/Exam</b>                | Oral exam or written exam  |
| <b>Reference</b>                 | <p>[1] Self-edited teaching material</p> <p>[2] The Automotive Chassis: Engineering Principles, ISBN 0 7506 5054 0</p>   |