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| | | | | | 1^{st} | year | | | 2 nd | year | | | 3 rd | year | | | 4 th | year | |
|-------------------------------------|---|---------|-------|-------|----------|-------|-----|-------|-----------------|--------|-----|-------|-----------------|--------|-----|-------|-----------------|-------|-----|
| | Course | Credits | Hours | Fa | 11 | Spri | ng | Fa | 11 | Spring | | Fall | | Spring | | Fa | 11 | Spri | ng |
| | | | | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab |
| | Chinese Literature : | 4 | 4 | 2 | | 2 | | | | | | | | | | | | | |
| | Appreciation and Creative Writing | г | г | | | | | | | | | | | | | | | | |
| | Practical English 1-2 | 0 | 4 | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| | Practical English 3-4 | 0 | 4 | | | | | 1 | 1 | 1 | 1 | | | | | | | | |
| | English for Business Communication 1 | 2 | 3 | | | | | | | | | 2 | 1 | | | | | | |
| | English for Business Communication 2 | 2 | 3 | | | | | | | | | | | 2 | 1 | | | | |
| | Practical English for Professionals 1 | 2 | 3 | | | | | | | | | | | | | 2 | 1 | | |
| Core Required Courses | Practical English for Professionals 2 | 2 | 3 | | | | | | | | | | | | | | | 2 | 1 |
| | Applied Information Technology : Office Software | 2 | 3 | 2 | 1 | | | | | | | | | | | | | | |
| | Applied Information Technology : Data Processing | 2 | 3 | | | 2 | 1 | | | | | | | | | | | | |
| | General Education | 12 | 12 | | | | | | | | | | | | | | | | |
| | Physical Education(1)-(6) | 0 | 12 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 | | | | | |
| | Subtotal | 28 | 53 | | | | | | | | | | | | | | | | |
| | Statistics | 6 | 10 | 3 | 2 | 3 | 2 | | | | | | | | | | | | |
| | Calculus | 6 | 10 | 3 | 2 | 3 | 2 | | | | | | | | | | | | |
| Professional Required Courses | Linear Algebra | 3 | 4 | 3 | 1 | | | | | | | | | | | | | | |
| | Economics | 6 | 8 | 3 | 1 | 3 | 1 | | | | | | | | | | | | |
| | Advanced Calculus with Applications in Statistics | 3 | 4 | | | | | 3 | 1 | | | | | | | | | | |

| | | | | | 1 st | year | vear | | 2^{nd} | | | | 3 rd y | year | | 4 th y | | year | |
|--------------|--|---------|-------|-------|-----------------|-------|------|-------|----------|-------|-----|-------|-------------------|-------|-----|-------------------|-----|-------------------|-----|
| | Course | Credits | Hours | Fal | 11 | Spri | ng | Fal | 11 | Spri | ng | Fal | 1 | Spri | ng | Fal | 11 | Sprin | ng |
| | | | | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab |
| | Applied Probability Theory | 3 | 4 | | | | | | | 3 | 1 | | | | | | | | |
| | Sampling Methods | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | Applied Regression Analysis | 3 | 3 | | | | | | | 3 | | | | | | | | | |
| | Statistical Computer Softwares | 3 | 5 | | | | | 3 | 2 | | | | | | | | | | |
| | Statistical Database | 3 | 3 | | | | | | | 3 | | | | | | | | | |
| Professional | Accounting | 6 | 8 | | | | | 3 | 1 | 3 | 1 | | | | | | | اا | |
| Required | Mathematical Statistics | 6 | 8 | | | | | | | | | 3 | 1 | 3 | 1 | | | ا ــــــ ا | |
| Courses | Experimental Design | 3 | 3 | | | | | | | | | 3 | | | | | | ا ــــــ ا | |
| | Applied Categorical Data Analysis | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| | Applied Statistical Computing and Graphing | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| | Special Topics in Statistical Information | 4 | 4 | | | | | | | | | | | 2 | | 2 | | | |
| | Subtotal | 64 | 84 | 12 | | 9 | | 12 | | 12 | | 9 | | 8 | | 2 | | 1 1 | 1 |

Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2015 Page 2 of 6

Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2015 Page 3 of 6 1st year 2nd year 3rd year 4th year

| | 2 | | | | | 1^{st} | year | | | 2^{nd} | year | | 3 rd year | | | | | | | |
|-------------------------------|--|--|---------|-------|----------|----------|-------|-----|-------|----------|-------|-----|----------------------|-----|-------|-----|-------|----------|-------|------|
| | | Course | Credits | Hours | Fa | | Spri | | Fa | | Spri | | Fal | | Spri | | Fa | | | ring |
| | | <u>г</u> | | | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab |
| | Required Elective Courses | Applied Programming in Statistics | 3 | 3 | | | 3 | | | | | | | | | | | | | |
| | Required Cou | Applied Multivariate Data Analysis | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| | l | Theory of Interest | 3 | 3 | | | | | 3 | | | | | | | | | [' | | ı ' |
| | ion | Risk Theory | 3 | 3 | | | | | | | | | 3 | | | | | · | | í ' |
| ourses | Business Statistics Information Group | Actuarial Mathematics-1 | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| ive Cc | cs Inf up | Actuarial Mathematics-2 | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| lect | atistics Group | Marketing Survey | 3 | 3 | <u> </u> | | | | | | | | | | 3 | | | <u> </u> | | |
| al E | Sta | Time Series Analysis | 3 | 3 | | | | | | | | | | | | | 3 | [' | | í ' |
| ion | less | Data Mining | 3 | 3 | | | | | | | | | | | | | 3 | <u> </u> | | í ' |
| Professional Elective Courses | Busir | Marketing Management | 3 | 3 | | | | | | | | | | | | | 3 | | | |
| Р | I | Marketing Research | 3 | 3 | <u> </u> | | | | | | | | | | | | | <u> </u> | 3 | |
| | | Introduction to Industrial Statistics | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | ics up | Quality Control | 6 | 6 | | | | | 3 | | 3 | | | | | | | <u> </u> | | |
| | Industrial Statistics Information Group | Reliability Methods | 3 | 3 | | | | | | | | | 3 | | | | | <u> </u> | | |
| | l Sté | Linear Programming | 3 | 3 | | | | | | | | | 3 | | | | | [' | | 1 |
| | trial mati | Operations Research | 3 | 3 | | | | | | | | | | | 3 | | | <u> </u> | | |
| | dus ifori | Quality Engineering | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| | In In | Special Topics in Practices of Industrial Statistics | 3 | 3 | | | | | | | | | | | | | 3 | | | |

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| | | | | | | 1 st y | year | | | year | | year | | 4 th year | | | | | | |
|-------------------------------|--------------------|------------------------------------|---------|-------|-------|-------------------|-------|-----|-------|------|-------|------|-------|----------------------|-------|-----|-------|-----|-------|-----|
| | | Course | Credits | Hours | Fa | 11 | Spri | | Fal | | Spri | | Fa | | Spri | | Fal | | Spri | |
| | | 1 | | | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab |
| | | Biology Information | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| | dno. | Applied Stochastic and Modeling | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| ourses | ttion G1 | Biology Statistical Methods | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| ctive C | Information Group | Epidemiology | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| Professional Elective Courses | | Medicine Statistical Methods | 3 | 3 | | | | | | | | | | | | | 3 | | | |
| ofessic | Biology Statistics | Survival Analysis | 3 | 3 | | | | | | | | | | | | | | | 3 | |
| Pr | Biolog | Nonparametric Statistics | 3 | 3 | | | | | | | 3 | | | | | | | | | |
| | | Applied Simulation | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| | | Applied Decision Methods | 3 | 3 | | | | | | | | | | | | | | | 3 | |
| | | Japanese (I & II) | 4 | 4 | | | | | 2 | 1 | 2 | 1 | | | | | | | | |
| | | Insurance | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | | Microeconomics | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| Gen | eral | Macroeconomics | 3 | 3 | | | | | | | 3 | | | | | | | | | |
| Elec Cou | tive rses | Introduction to the Civil Code | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | | Business Law | 3 | 3 | | | | | | | 3 | | | | | | | | | |
| | | Business Management | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | | Money and Banking | 3 | 3 | | | | | | | | | 3 | | | | | | | |

| | | | | | 1^{st} | year | | | 2^{nd} | year | | | 3 rd | year | | | 4 th | year | |
|----------|----------------------|---------|-------|-------|----------|-------|-----|-------|----------|-------|-----|-------|-----------------|-------|-----|-------|-----------------|-------|-----|
| | Course | Credits | Hours | Fa | | Spri | ng | Fal | | Spri | ng | Fa | | Spri | ng | Fa | | Spri | ng |
| | | | | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab |
| | Practice in | 2 | 2 | | | | | | | | | 3 | | | | | | | |
| | International Trade | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| | Public Finance | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| | Special Topics in | 3 | 3 | | | | | | | | | | | 3 | | | | | |
| | Statistics-1 | 5 | 5 | | | | | | | | | | | 5 | | | | | |
| | Special Topics in | 3 | 3 | | | | | | | | | | | | | 3 | | | |
| | Statistics-2 | | | | | | | | | | | | | | | _ | | | |
| | Financial Management | 3 | 3 | | | | | | | | | | | | | 3 | | | |
| | Investment | 3 | 3 | | | | | | | | | | | | | | | 3 | |
| | Military Training | 0 | 4 | 2 | | 2 | | | | | | | | | | | | | |
| | Education (I & II) | 0 | 4 | 2 | | 2 | | | | | | | | | | | | | |
| | Nursing Education | 0 | 4 | 2 | | 2 | | | | | | | | | | | | | |
| | (I& II) | 0 | 4 | 2 | | Z | | | | | | | | | | | | | |
| | Military Training II | 0 | 4 | | | | | 2 | | 2 | | | | | | | | | |
| | Physical Education | 4 | 4 | | | | | | | | | | | | | 2 | | 2 | |
| | Fundamental | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | Mathematics | 5 | 5 | | | | | 5 | | | | | | | | | | | |
| | Introduction to | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | Mathematics | | | | | | | | | | | | | | | | | | |
| | Mathematics History | 3 | 3 | | | | | 3 | | | | | | | | | | | |
| | Numerical Analysis | 3 | 3 | | | | | | | 3 | | | | | | | | | |
| | Geometry | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| | Topology | 3 | 3 | | | | | | | | | 3 | | | | | | | |
| | Subtotal | 36 | | | | | | | | | | | | | | | | | |
| Subtotal | | | | | | | | | | | | | | | | | | | |
| Required | 92 | | | | | | | | | | | | | | | | | | |
| Course | | | | | | | | | | | | | | | | | | | |
| Credits | | | | | | | | | | | | | | | | | | | |
| Elective | 26 | | | | | | | | | | | | | | | | | | |
| Course | 36 | | | | | | | | | | | | | | | | | | |
| Credits | | | | | | | l | | | | | | | | | | | | Ĺ |

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Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2015 Page 6 of 6

| Γ | | | | | 1^{st} y | ^t year | | 2^{nd} year | | | | | vear | | | | | | |
|---|-------------|---------|-------|-------|------------|-------------------|-----|---------------|-----|--------|-----|-------|------|-------|-----|-------|-----|-------|-----|
| | Course | Credits | Hours | Fall | | Spring | | Fall | | Spring | | Fal | 1 | Spri | ng | Fal | | Spri | ng |
| | | | | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab | class | lab |
| | Grand Total | 128 | | | | | | | | | | | | | | | | | |

Notes:

- 1. In accordance with MCU General Provisions for Study, all undergraduate students must pass the requirements for Service-Learning, English Proficiency, Information Technology Proficiency, Chinese Proficiency, Sports Ability, and Basic Professional Skills in order to graduate.
- Students are required to take at least 12 credit hours of General Education courses. There are three disciplines within General Education Humanities, Social Science and Natural Science. The courses are categorized into "Core Courses" and "Extended Courses" under each discipline. To meet the graduation requirements, students are required to take at least one 2-credit-hour course in each category of each of the disciplines.