

机械设计与制造专业人才培养方案

460101

1

表 1 职业面向表

| | | | | | |
|----|--------|----------------|--|--|----------------|
| | | | | | |
| 46 | (4601) | (3561) 3563 | 2-02-07-01 2-02-07-02 6-04-01-00 | | 1+X 1+X |

1.

CAD

2

2

表 2 岗位能力要求及对接的课程分解图表

| | | | | |
|---|--|--|---------|--|
| | | | | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | AutoCAD | |

3D

1.

1

2

3

4

5

1-2

6

1-2

2

1

2

3

4
5
6
7
8

3

1
2
3
4
5
6
7
8
9
10
11

3D

“

”

1.

2

1

11

AutoCAD

2

6

3

A

4 2 1

SolidWorks

UG

4 2 1

4 2 1

C

B

24

6

CAE

4

4

1.

“ ”

“

”

“

”

“

”

“

”

“

”

“

”

“

”

“

”

“

”

“

”

“ ”

1-2

“ ”

1

2

3

50%

2

1

“

”

“ ”

“ ”

& &

“ - - - ”

“ ”

“

”

Aut oCAD

Aut oCAD

&

CAD CAM

FANUC

“ ”

UG-CAM

CAD

3

SolidWorks

SolidWorks

SolidWorks

SolidWorks

SolidWorks

UG

CAD

“ — ”

“ ”

C

—C

C

C

PLC

PLC

PLC

PLC

PLC

PLC

PLC

PLC

ABB

PLC

“ ”

“

”

“ ”

RFID

4

“ 1+X”

“ 1+X”

1+X

6S

3

表3 教学活动周数分配表

| | | | | | | | | |
|--|---|---|----|----|----|---|----|-----|
| | | | | | | | | |
| | 1 | 3 | 14 | 2 | | 1 | 20 | 40 |
| | 2 | | 18 | 2 | | | 20 | |
| | 3 | | 18 | 2 | | | 20 | 40 |
| | 4 | | 18 | 2 | | | 20 | |
| | 5 | | 18 | 2 | | | 20 | 40 |
| | 6 | | | | 20 | | 20 | |
| | | 3 | 86 | 10 | 20 | 1 | | 120 |

| | | |
|-----|----------|----------|
| | 2600 | 139 |
| 50% | 752 | 28.9% 41 |
| | 1848 | 71.1% 98 |
| 328 | 12.6% 20 | 4 |

表4 各类课程学时、学分分配表

| | | | | | |
|--|------|------|-----|------|-----|
| | | % | | % | |
| | 752 | 28.9 | 41 | 29.5 | 1/4 |
| | 1848 | 71.1 | 98 | 70.5 | |
| | 2600 | | 139 | | |
| | 2272 | 87.4 | 119 | 85.6 | |
| | 328 | 12.6 | 20 | 14.4 | 10% |

| | | |
|---|------|-----|
| | 1430 | 50% |
| % | 55 | |

5

表5 教学进程安排表

| | | | | | | 16 | 18 | 18 | 18 | 18 | 20 | | |
|----|-----------|---|---|----|----|----|-------|-------|-------|-------|-----|--|--|
| | | | | | | / | | | | | | | |
| 1 | 99000742B | | 2 | 36 | 32 | 4 | | | 2/36 | | | | |
| 2 | 99000752B | | 3 | 54 | 48 | 6 | | | | 3/54▲ | | | |
| 3 | 99000682A | 1 | 3 | 20 | 20 | 0 | 2/20 | | | | | | |
| 4 | 99000692B | 2 | | 34 | 30 | 4 | | 2/34 | | | | | |
| 5 | 99000032A | 1 | 1 | 8 | 8 | 0 | (8) | | | | | | |
| 6 | 99000612A | 2 | | 8 | 8 | 0 | | (8) | | | | | |
| 7 | 99000622C | 3 | | 8 | 0 | 8 | | | (8) | | | | |
| 8 | 99000062A | 4 | | 8 | 8 | 0 | | | | (8) | | | |
| 9 | 99000072A | 5 | | 8 | 8 | 0 | | | | | (8) | | |
| 10 | 99000082B | 1 | 3 | 56 | 30 | 26 | 4/56▲ | | | | | | |
| 11 | 99000092B | 2 | 4 | 72 | 46 | 26 | | 4/72▲ | | | | | |
| 12 | 99000122B | 1 | 2 | 36 | 4 | 32 | 2/36▲ | | | | | | |
| 13 | 99000132B | 2 | 2 | 36 | 4 | 32 | | 2/36▲ | | | | | |
| 14 | 99000142B | 3 | 2 | 36 | 4 | 32 | | | 2/36▲ | | | | |
| 15 | 99000542B | | 3 | 48 | 24 | 24 | 4/48▲ | | | | | | |
| 16 | 99000592B | | 2 | 32 | 4 | 28 | | (16) | (16) | | | | |
| 17 | 99000602A | | 1 | 16 | 16 | 0 | | (16) | | | | | |
| 18 | 99000582B | | 2 | 32 | 16 | 16 | | | 2/32 | | | | |
| 19 | 99000172B | 1 | 2 | 12 | 6 | 6 | (12) | | | | | | |
| 20 | 99000182B | 2 | | 12 | 6 | 6 | | | (12) | | | | |
| 21 | 99000192B | 3 | | 12 | 6 | 6 | | | | (12) | | | |
| 22 | 99000572B | | 2 | 32 | 28 | 4 | | | 2/32 | | | | |
| 23 | 99000702B | 1 | 2 | 16 | 8 | 8 | (16) | | | | | | |
| 24 | 99000712B | 2 | | 16 | 8 | 8 | | (16) | | | | | |
| 25 | 99000212C | | 2 | 56 | 0 | 56 | (56) | | | | | | |

| | | | | | | | | | | | | | | |
|----|-----------|---------|-----------|------------|------------|------------|---------------|---------------|---------------|---------------|-------------|----------|--|----------|
| 26 | 99000202A | | 1 | 12 | 12 | 0 | (12) | | | | | | | |
| | | | 39 | 716 | 384 | 332 | 12/264 | 8/198 | 8/172 | 3/74 | 0/8 | 0 | | |
| 1 | | 2~5 | 2 | 36 | 18 | 18 | | 36 | | | | | | |
| | | | 2 | 36 | 18 | 18 | 0 | 0 | 0 | 0/36 | 0 | 0 | | |
| | | | 41 | 752 | 402 | 350 | 12/264 | 8/198 | 8/172 | 3/110 | 0/8 | 0 | | |
| 1 | 02010010B | | 3 | 56 | 40 | 16 | 4/56▲ | | | | | | | |
| 2 | 02010020B | I | 3 | 56 | 40 | 16 | 4/56▲ | | | | | | | |
| 3 | 02020030B | | 3 | 56 | 32 | 24 | 4/56▲ | | | | | | | ★ |
| 4 | 02010040B | II | 4 | 64 | 16 | 48 | | 4/64 | | | | | | |
| 5 | 02010050B | | 3 | 48 | 36 | 12 | | 3/48 | | | | | | |
| 6 | 02010080B | | 4 | 64 | 32 | 32 | | 4/64▲ | | | | | | |
| 7 | 02020070B | | 4 | 64 | 48 | 16 | | 4/64▲ | | | | | | |
| 8 | 02010350B | | 1 | 28 | 3 | 25 | | (28) | | | | | | |
| 9 | 02010360B | | 1 | 28 | 3 | 25 | | (28) | | | | | | |
| | | | | | | | 2 | | | | | | | |
| 10 | 02010090B | | 5 | 108 | 72 | 36 | | | 6/108▲ | | | | | ★ |
| 11 | 02010160B | | 4 | 72 | 36 | 36 | | | 4/72▲ | | | | | ★ |
| 12 | 02020120B | AutoCAD | 2 | 32 | 16 | 16 | | 2/32 | | | | | | ★ |
| | | | 37 | 676 | 374 | 302 | 12/168 | 17/328 | 10/180 | 0 | 0 | 0 | | |
| | | | 37 | 676 | 374 | 302 | 12/168 | 17/328 | 10/180 | 0 | 0 | 0 | | |
| 1 | 02020130B | | 4 | 64 | 32 | 32 | | | 4/64▲ | | | | | 1+X ★ |
| 2 | 02020140B | | 4 | 64 | 32 | 32 | | | | 4/64 | | | | |
| 3 | 02020150B | | 4 | 64 | 32 | 32 | | | | 4/64 | | | | 1+X ★ |
| 4 | 02020160B | | 4 | 72 | 36 | 36 | | | | 4/72▲ | | | | |
| 5 | 02020170B | | 4 | 64 | 32 | 32 | | | | 4/64 | | | | |
| 6 | 02020180B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | |
| | | | 24 | 392 | 196 | 196 | 0 | 0 | 4/64 | 16/264 | 4/64 | 0 | | |
| | | | 24 | 392 | 196 | 196 | 0 | 0 | 4/64 | 16/264 | 4/64 | 0 | | |

| | | | | | | | | | | | | | | | | |
|---|---|-----------|------------|------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|-----|---|
| 1 | 2 | 02020221B | SolidWorks | 4 | 64 | 32 | 32 | | | | 4/64 | | | ★ | 4 | |
| | | 02020321B | UG | 4 | 64 | 32 | 32 | | | | 4/64 | | | | | |
| | 2 | 02020201B | | 4 | 64 | 32 | 32 | | | | | 4/64▲ | | | ★ | 4 |
| | | 02020231B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | | |
| | 2 | 02020191B | C | 4 | 64 | 32 | 32 | | | | | 4/64 | | | | 4 |
| | | 02020211B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | | |
| | 1 | 1 | 02020271B | CAE | 2 | 36 | 18 | 18 | | | | | 2/36 | | | 6 |
| | | 2 | 02020311B | | 2 | 36 | 18 | 18 | | | | | 2/36 | | | |
| | | 3 | 02020391B | | 2 | 36 | 18 | 18 | | | | | 2/36 | | | |
| | | 4 | 02020401B | | 2 | 36 | 18 | 18 | | | | | 2/36 | | | |
| | | 5 | 02020241B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | |
| | | 6 | 02020251B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | |
| 7 | | 02020411B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | | |
| 8 | | 02020421B | | 4 | 64 | 32 | 32 | | | | | 4/64 | | | | |
| | | | | 48 | 784 | 392 | 392 | | | | | | | | | |
| | | | | 18 | 292 | 146 | 146 | | | | | | | | | |
| | | | | 18 | 292 | 146 | 146 | 0 | 0 | 0 | 4/64 | 14/228 | 0 | | | |
| 1 | 1 | 02020060C | | 1 | 32 | 0 | 32 | | 32 | | | | | | | |
| | 2 | 02020350B | | 4 | 72 | 36 | 36 | | | 4/72 | | | | | 1+X | |
| | 3 | 02020330B | | 2 | 48 | 16 | 32 | | | | 3/48 | | | | 1+X | |
| | 4 | 02020340C | | 12 | 336 | 0 | 336 | | | | | | | 336 | | |
| | | | | | 19 | 488 | 52 | 436 | 0 | 0/32 | 4/72 | 3/48 | 0 | 0/336 | | |
| | | | | 19 | 488 | 52 | 436 | 0 | 0/32 | 4/72 | 3/48 | 0 | 0/336 | | | |
| | | | | 98 | 1848 | 768 | 1080 | 12/168 | 17/360 | 18/316 | 23/376 | 18/292 | 0/336 | | | |
| | | | | | 2600 | 1170 | 1430 | 24/432 | 25/558 | 26/488 | 26/486 | 18/300 | 0/336 | | | |
| | | | | 139 | | | | | | | | | | | | |

- 说明： 1. 每学期考试科目均用“▲”在备注栏标注，没标注的为该学期考查科目。
2. 《健康教育》安排在新生入学教育期间以专题形式开展，不占用总学时。
3. 开展线上线下混合教学的课程用“★”在备注栏标注。

20 18 50%
3 14 3
7 “ ” 78%

1.

2

1

2

3

4

65

2

1

2

PLC

CAD/CAM

A

| | | | | |
|---|---------|---------|---------|----|
| | | | | 30 |
| | | | | 15 |
| 1 | | | | 2 |
| | | | | 1 |
| | | | | 2 |
| 2 | | | | 10 |
| | | | | 5 |
| 3 | PLC | PLC | PLC | 60 |
| 4 | | | | 60 |
| | | | | 1 |
| 5 | | | ABB | 4 |
| | | | | 12 |
| 6 | | | | 60 |
| | | | 2KW | 60 |
| 7 | CAD/CAM | AutoCAD | CAD/CAM | 60 |
| 8 | | | | |

| | |
|--|---|
| | |
| | |
| | 80 1200 |
| | <p>1.</p> <p>https://www.cnmooc.org/portal/myCourseIndex/1.noooc</p> <p>https://www.cnmooc.org/portal/course/6315/20438.noooc</p> <p>https://www.xueyionline.com/detail/227712248</p> <p>2</p> <p>https://www.icourse163.org/</p> <p>https://nooc.icve.com.cn/</p> |

“ ”

1. “ 1410+N”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

N

2

“ ”

“ - - ”

“

”

“ ”

3

“ - - ”

4

60%

“ + ”

1+X

5

139

39

80

20

“ + ”

6 7

表 6：职业技能等级证书（含职业资格证书）

| | | | | | |
|---|--------|--|--|--|--|
| | | | | | |
| 1 | “ 1+X” | | | | |
| 2 | “ 1+X” | | | | |

表 7：基本技能证书

| | | | | | |
|---|--|---|--|--|--|
| | | | | | |
| 1 | | B | | | |
| 2 | | | | | |

(一) 教学进程安排表

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | -- | -- | -- | -- | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | |
| | // | | | | | | | | | -- | | | | | | | | | | ● |

(三) 参与制订的企业

汕头市高德斯精密科技有限公司