







```

....." H %
%% ..... " H %
%& ..... " H %
..... " H (
..... " H )
'"% ..... " H )
'"& ..... " H +
"' ..... " H +
'"( ..... " H ,
'" ) ..... " H ,
..... " H -
("% ..... " H -
("& ..... " H -
("' ..... " H -
("( ..... " H -
(") ..... " H %
..... " H %
)"% ..... " H %
)"& ..... " H %
)"&"% ..... " H %
)"&"& ..... " H %
)"&"' ..... " H %
)"&"( ..... " H %
)"' ..... " H %
)"'"% ..... " H %
)"'"& ..... " H %
)"( ..... " H %
)" ) ..... " H %

```

)" *	.....	" H %
)" +	.....	" H %
	.....	" H %
*" %	.....	" H %
*" &	.....	" H %
*" '	.....	" H %
*" (	.....	" H &\$
*" (" %	.....	" H &\$
*" (" &	.....	" H &\$
*" (" '	.....	" H &\$
*")	.....	" H &%
*")" %	.....	" H &%
*")" &	.....	" H &%
*")" '	.....	" H &&
*" *	.....	" H &
*" +	.....	" H &
*" ,	.....	" H &
*" -	.....	" H &
*" %\$	.....	" H &)
	.....	" H &)
	.....	" H &*
	.....	" H &*

---

1.1

3+1

- -

1.2

(1)

;(2)

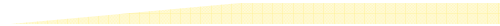
(3)

;(4)

(5)



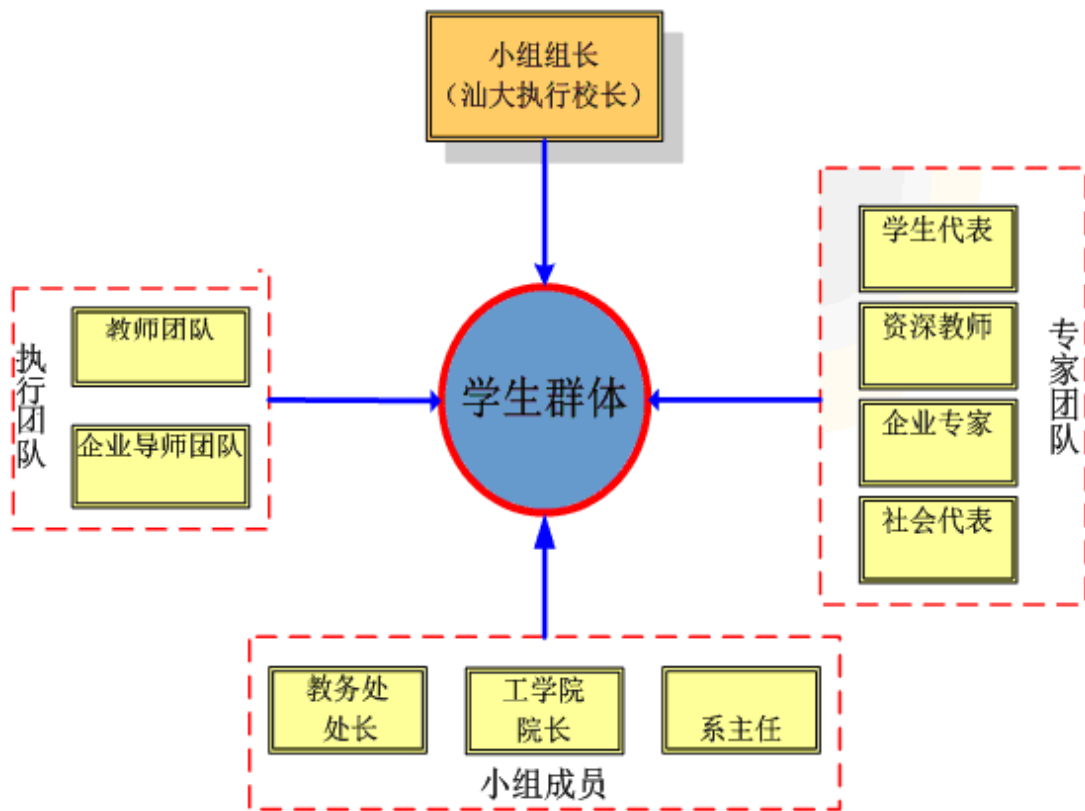






2

5 ( 5 )



&

(1) ;

(2)

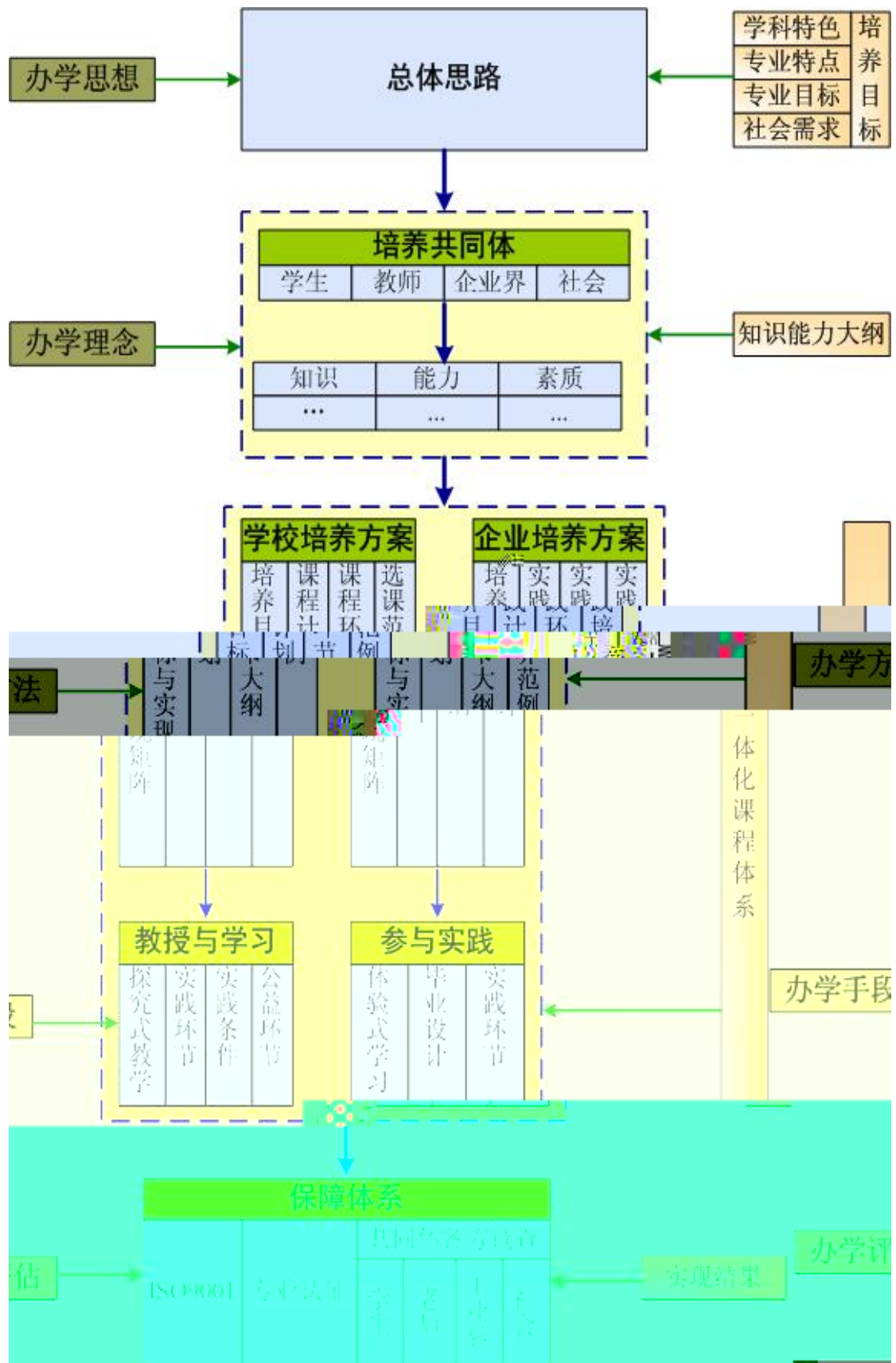
(3) ;

(4)

(5)

### 3.1

! !



---

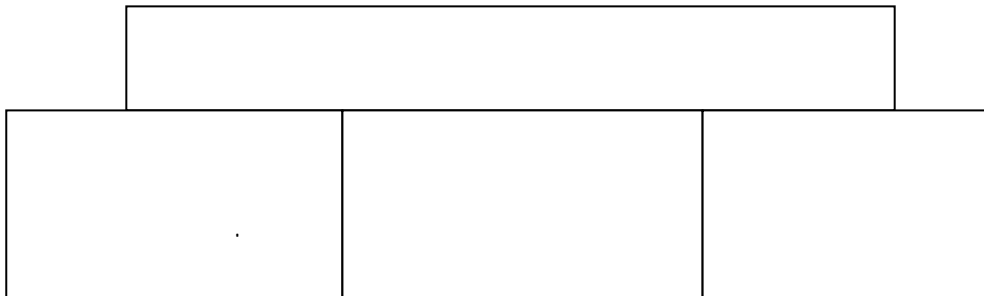
3.2

fl

ł

fl

ł



3.3



---

=GC

4.1

4.2

3+1

3

1

4.3

2009-2010

20%

14

2011

30% ( ) 25

70% ( ) 45

4.4

(GPA y 70%+

y 30%)

---

4.5

5.1

- 
- 
- 
- 
- 

5.2

---

5.2 1

( )

( ) 1

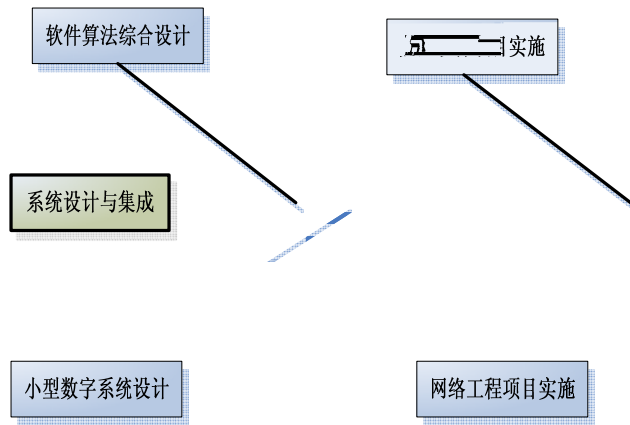
2



---

5.2.2

5





**3 ( I-III)**

---

5.23

4

5.24

---

5.3

5.3.1

3

IT

---

5.3.2

5.4

---

5.5

20%

60%

3 5 2 ( )

---

5.6

5.7

ELC4

		53		
			28	
	26	24		20
12	82			
	163			

3+1

2 ( 6.2 ) - )



( )

( )

( )

## 6.1

## 6.2

(

3

)

(4.1 4.2)

(2.1

2.2 2.3)

4.2) Ñ 2.3)



---

6.4

6.4.1

6.4.2

6.4.3



- ( )
- ( )
- ( )
- 6.8
- ( )

6.5

6.5.1

6.5.2

.

ô P~6f € 0

10E : ð0 š õ š Ü,X E î <!đ~pĐÀ Qñ ... ] : ð\Đt0: %ÆI÷ äP &μ ä ì&μ å

---

6.5.3

1

1

1

		6		
		6		
		24		



---

1





---

■

1 2010 10 2010  
20

6.10

- 
- 
- 
- 

' %

) (\$\$  
' \$\$

&\$\$\$!) \$\$\$ #

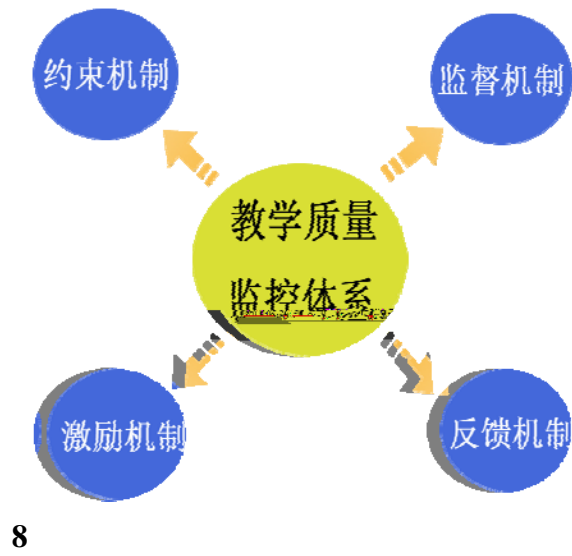


ISO

---

PDCA( - - - )

8



8

ISO



---

ISO

- ISO
- 
-

1	I - 1
2	II - 1
3	III - 1
4	V - 1

---

1

1.

2.

3.

4.

(1)

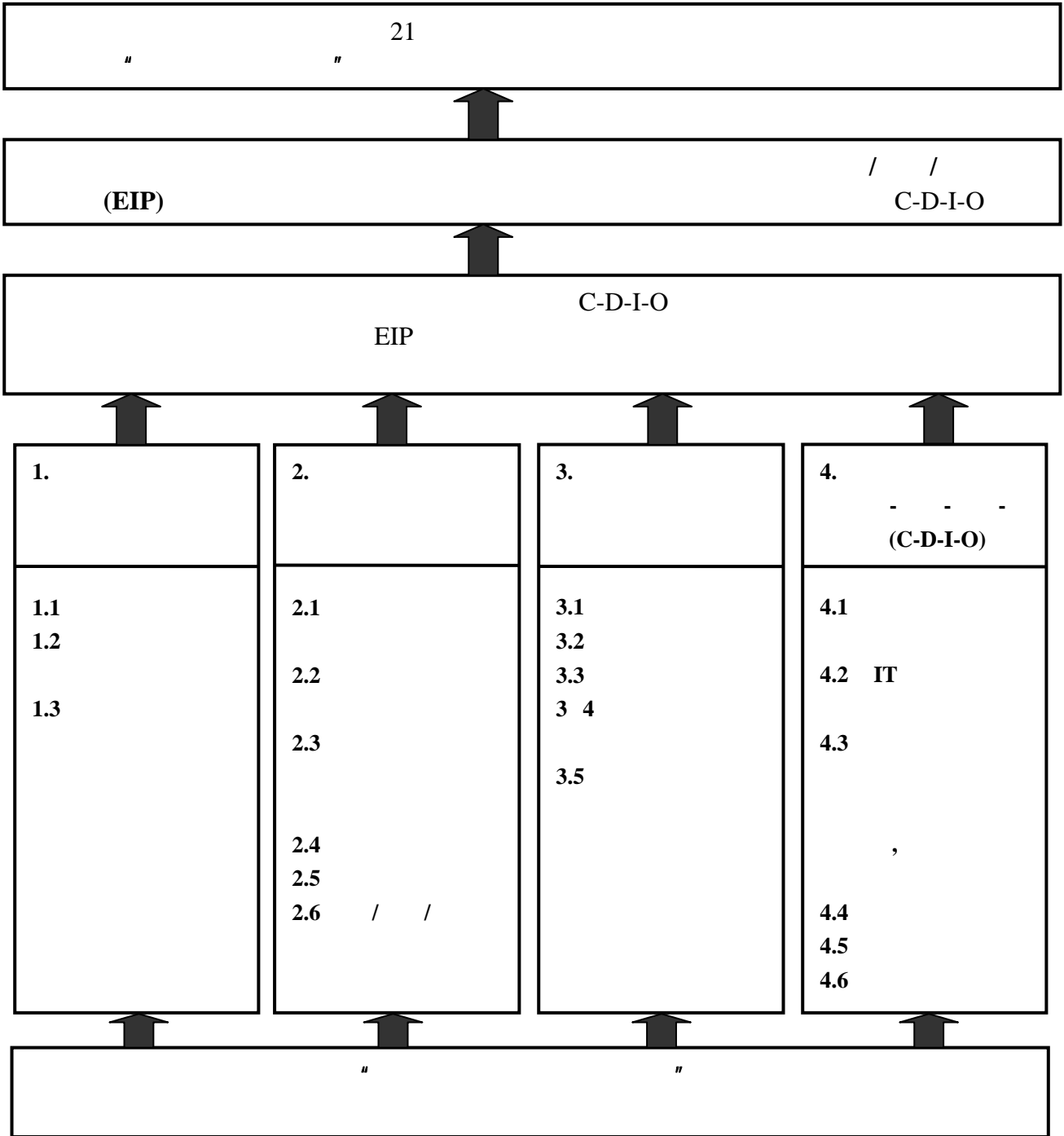
(2)

/ /

(3)

(4)

(5)



---

17

17

**1.**

1.1

1.2

1.3

**2.**

2.1

2.2

2.3

2.4

2.5

**3.**

3.1

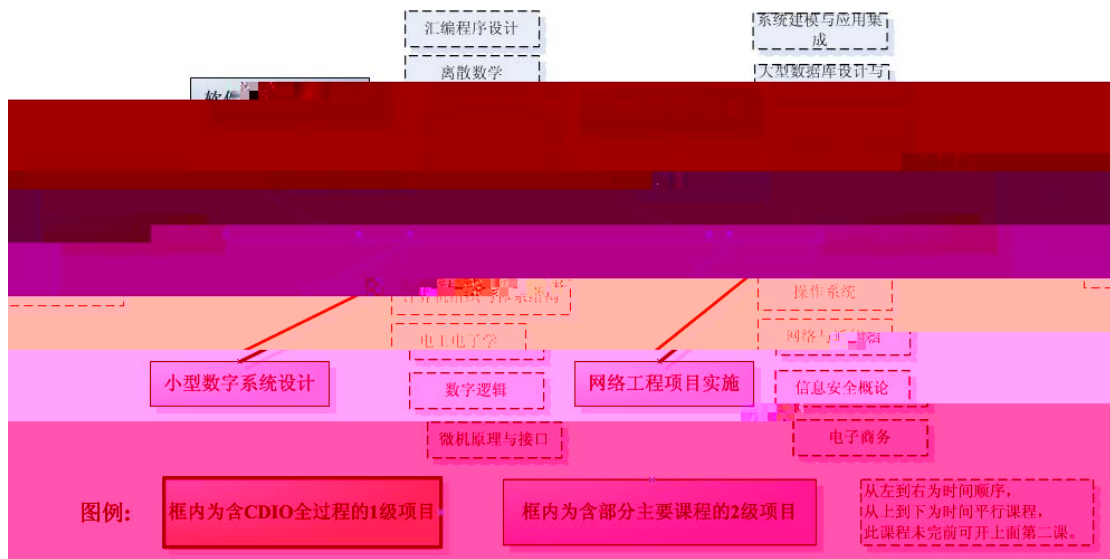
3.2

3.3

**4.**

- 4.1
- 4.2
- 4.3
- 4.4
- 4.5
- 4.6

计算机科学与技术专业核心课程培养结构



1.		41		ELC4
2	12			
3	28			
4	26	24	20	13

---

注: (1) 带五角星 (☆) 的课程为综合本专业核心专业领域的 1 级综合项目, 1 级项目为本专业的核心骨架, 必须按照给定的时间选修;

(2) 带双五角星 (☆☆) 的课程为 2 级综合项目, 2 级项目带领一组相关课程并有可能跨学期, 选课时必须考虑相关课程的选修以及时间顺序。

(3) 带 # 号为限选课课程, 带 & 号为工学院必修课, 带 && 号为工学院选修课, 带 \* 号为本系必修课, 带 \*\* 号为本系选修课。

---

	<b>11</b>	<b>28</b>	
MAT1110			6
MAT1210			6
MAT1130			2
MAT1240			3
			4
PHY1000			2
ENC9101			2
ENC9301			1
			1
			1
	<b>8</b>	<b>26</b>	
			2
CST9104			4
	I		4
	II		2
CST9208			3
CST9209			3
CST9210			4
			4
	<b>6</b>	<b>24</b>	
CST9211			4
CST9305			4
CST9306			3
CST9308			4
CST9309			4
CST9307			3
			2





---

5.2

(7 )

2

2

2

( )

2

2

2

2

5.3

7

2

2

CST9016

2

2

2

2

2

1-6

6

6	<b>Evaluation</b>		Appraise( ) Interpret( ) Criticize( ) Justify( ) Support( )

5	<b>Synthesis</b>		Design( ) Develop( ) Create( ) Compose( ) Organize( ) Reconstruct( )
4	<b>Analysis</b>		Analyze( ) Break down( ) Identify( ) Present( ) Formulate( ) Subdivide( )
3	<b>Application</b>		Apply( ) Conduct( ) Solve( ) Demonstrate( ) Compute( ) Relate( )
2	<b>Comprehension</b>	“ ”	Explain( ) Distinguish( ) Paraphrase( ) Summarize( ) Generalize( )
1	<b>Knowledge</b>	,	Define( ) Label( ) List( ) Recite( ) Select( )



2

3

4

		1.1	1.2	1.3	2.1	2.2	2.3	2.4	2.5	2.6	/	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	4.6	
1																							
		12	3			2						2				2	2						
		2	3									2				2	2						
		3	2		1							2				2	2						
		6	2									2				2	2						
		2	1		1			2	2	3		3		3		3	3	2	1	3			
		1	1		1							3	3	2		3	3	2	1	2			
		2	1		1		2					2		1		2	3		1	1			
		4	3	3	3	2	2	2	2	2		2	2	2							2	2	2
		2	2	2	2	3	2	2	3	2		3	3	2	1	3	3	2	1	1	2	2	2
2																							
		6	2	3		1		1				3	1			2	3						
		3		3	2	1		1		1		3		1		2	3						
		3		2	3	2	1	1				3		1		2	2			1	1	1	
		4	3	3	4	3	2	2	2	2		2	2	2						2	2	2	2
		4		2	2		1		1			2	1	1		2	2			1	1		
		1	3	2	2	2	3	3	3	3		3	4	3	1	3	3	2	1	2	3	2	3
		1		2	2	3	3	3	3	3		3	3	3	1	3	3	2	1	2	2	2	2
		1		2	2	3	3	3	3	3		3	3	3	1	3	3	2	1	2	2	2	2
3																							
		4		3	4	2	1	2	2	1		2	2	2		2	2			2	2	1	
		4		3	3	2	1	2	2	1		3	1	1		3	3			1	2		
		4		3	4	2	3	1	2	2		3	1	1		3	3			2	2	1	
		4		3	4	2	2	2	2	2		3	1	1		3	2			2	2	1	
		3		3	4	3	2	2	2	2		3	1	1		3	3			2	2	1	
		3		3	4	2	1	2	2	1		3	2	2		3	2			2	2	1	
		2		2	3	2	1	2	2	1		3	1	1		3	3			2	2	2	
		1		2	3	3	3	3	3	3		3	3	3	2	3	3	2	2	2	3	3	2
		1		2	3	3	3	3	3	3		3	3	3	2	3	3	2	2	2	3	3	2
4																							
		7		2	2	2	1	1	1	1		2	1	1		2	2			1	2	2	
		7		2	2	2	1	1	1	1		2	1	1		2	2	2	3	1	2	2	
		1			2	3	3	2	2	2		3	2	2		3	3	2	2	2	2	3	3
		1		3	3	3	2	2	2	2		3	2	2	2	3	3	2	3	2	2	2	2
		10										3	2	3	2	3	3	3	2	3	3	3	
		101																					

3	3	4	3	3	3	3	3	3	3	3	3	3	3	2	3	3	2	3	3	3	3	3
11	26	30	27	26	25	27	25	35	26	29	8	33	33	14	15	28	26	24	11			
4	4	5	4	4	4	4	4	4	4	4	3	4	4	3	4	4	3	4	4	4	4	4



3

1

1.1

1.1.1 ( )

1.1.2

1.2

1.2.1

1.2.2

word

Excel

Powerpoint

Internet

Matlab

Visual Studio

Eclipse

UML

MySQL

1.3

1.3.1

1.3.2



1.3.3

1.3.4

1.3.5

1.3.6

/  
Web

1.3.7

1.3.8

1.3.9



VHDL

/ /  
**1. 3 10**

Intel 80x86

I/O

**1. 3 11**

**1. 3 12**

**1. 3 13**





1. 3 14

1. 3 15

1. 3 16  
PL/O

LR

2

2.1

2 1. 1



2 1. 2

2 1. 3

2 1. 4

2 1. 5

**2.2**

2 2 1

2 2 2

2 2 2

2 2 3



### **2.3**

2 3 1

2 3 2

2 3 3

2 3 4

### **2.4**

2 4 1

2 4 2

2 4 3



2 4 4

2 4 5

2 4 6

2 4 7

/

**2.5**

2 5 1

2 5 2

2 5 3

2 5 4



**3**

**3.1**

**3.1.1**

**3.1.2**

**3.1.3**

**3.1.4**

**3.1.5**

**3.2**

**3.2.1**

**3.2.2**



3 2 3

3 2 4

3 2 5

3 2 6

**3.3**

3 3 1

**4**

**4.1**

4.1.1

4.1.2

4.1.3

4.1.4

4.1.5



4.1.6

**4.2**

4.2.1

4.2.2

4.2.3

4.2.4

**4.3**

4.3.1



/

4.3.2

4.3.3

4.3.4

4.4

4.4.1

4.4.2

4.4.3





4.4.4

4.4.5

4.4.6            DFX

4.5

4.5.1

4.5.2

4.5.3

4.5.4

4.5.5

/



4.5.6

**4.6**

4.6.1

4.6.2

4.6.3

4.6.4

4.6.5

4.6.6



(2005)

158.0  
ELC4

---

**[1]** ( )

12.0

[SOC1010] (2.0)

[SOC1020] (2.0)

[SOC2040] (2.0)

[SOC2050] (2.0)

[SOC3060] (2.0)

[SOC3070] (2.0)

**[6]**

2.0

[COM1011] (2.0)

**[7]**

4.0 (PED )

**[10]**

2.0 (AED )

**[11]**

**[12]**

**[13]**



**[16] (12)**

**[1501]**

5.0  
[ENC1001] (1.0)  
[ENC1002] (4.0)

**[1502]**

25.0  
[MAT1110] (6.0)  
[MAT1130] (2.0)  
[MAT1210] II (6.0)  
[MAT1240] (3.0)  
[PHY1000] (2.0)  
[PHY1010] 1 (4.0)  
[PHY1020] 2 (2.0)

**[1503]**

43.0  
[CST2044] (4.0)  
[CST2052] (3.0)  
[CST2061] (2.0)  
[CST3090] (4.0)  
[CST3100] (4.0)  
[CST3110] (3.0)  
[CST3120] (4.0)  
[CST3130] (4.0)  
[CST3150] (3.0)  
[CST3210] (3.0)  
[CST9200] I (4.0)  
[CST9201] II (2.0)  
[EEG2160] (4.0)

**[1504]**

11 , 16.0



[CST1930]	(1.0)
[CST2045]	(1.0)
[CST3091]	(1.0)
[CST3092]	(1.0)
[CST3101]	(1.0)
[CST3131]	(1.0)
[CST3132]	(1.0)
[CST4330]	(1.0)
[CST4341]	(6.0)
[EEG2170]	(1.0)
[EEG2180]	(1.0)

**[1505]**

	23.0
[CST2070]	(3.0)
[CST2080]	(3.0)
[CST3140]	(3.0)
[CST3160]	(3.0)
[CST3170]	(3.0)
[CST3180] Unix	(3.0)
[CST3191]	(2.0)
[CST3192]	(1.0)
[CST3200]	(3.0)
[CST3230]	(3.0)
[CST3231]	(2.0)
[CST3251]	(2.0)
[CST3260]	(3.0)
[CST3390]	(2.0)
[CST9001]	(2.0)
[CST9002]	(2.0)
[CST9004]	(2.0)
[CST9006]	(2.0)
[CST9007]	(2.0)
[CST9008]	(2.0)
[CST9010]	(3.0)
[CST9016]	(2.0)
[CST9017]	(2.0)
[CST9019]	(2.0)
[CST9020]	(2.0)



[CST9021]		(2.0)
[CST9026]	Java	(2.0)
[CST9027]	Java Web	(2.0)
[EEG2080]		(1.0)
[EEG2130]		(1.0)
[EEG3030]		(3.0)
[EEG4070]		(3.0)
[EEG9070]		(2.0)
[EEG9930]		(2.0)
[ENC8001]	CDIO	(2.0)

**[2063]**

	1	,	1.0
[HOS1000]		(1.0)	

:

:

:

CST9210

4

20110322-CST9210

( )

( )

**2011 3**







:		64
	3	12
		12
<hr/>		
<u>          </u> :		88

:	20 %
	10 %
	70 %
<hr/>	
	100 %

- 1 D.E.Knuth
- 2 Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein,  
Introduction to Algorithms MIT Press



†

—			3	1 2 1:
			2	2 1:
			2	1:
			4	3 4 1:
			2	5
			3	6 7 8 2:
			3	9 3:
			1	10
			3	11 12 4:
			3	13 14
—			4	15
			2	16 17
			3	18 5
		3	19 6	

EIP-CDIO

			2	20 6
			4	21 22 6
			3	23 6
			2	24 6
			2	25

†

\*

78=0

%&ž' ž(ž)ž\*

†

*	<b>Evaluation</b>		Appraise( ) Interpret( ) Criticize( ) Justify( ) Support( )	( )
)	<b>Synthesis</b>		Design( ) Develop( ) Create( ) Compose( ) Organize( ) Reconstruct( )	( )
(	<b>Analysis</b>		Analyze( ) Break down( ) Identify( ) Present( ) Formulate( ) Subdivide( )	( )
,	<b>Application</b>		Apply( ) Conduct( ) Solve( ) Demonstrate( ) Compute( ) Relate( ) Use( )	
&	<b>Comprehension</b>	” “	Explain( ) Distinguish( ) Paraphrase( ) Summarize( ) Generalize( )	
%	<b>Knowledge</b>	,	Define( ) Label( ) List( ) Recite( ) Select( )	

569T	78=0		
f1L	% % % & %'	(	
fM	&" & &"%'% &"%')	'	%
fM	("' ("'"% ("' ("'% ("'"	&	
fX	' "% ' "% & ' "% ( ' " & ' " &"' ' " &")	%	
fY	&" % &"%'% &"%' &"%')	&	'
fZ	&") &")"% &")"'	%	
f[	' " & ' " &"% ' "' ' " &" & ' " &" * ' "'	&	





EIP-CDIO

V	("' ("'"& ("'"% ("'"' ("'"(	%	
W	%' % &' %	&	

†

%&ž' ž(ž)ž\*

\*

%	(		
&	(		
'	(	%	
(	(		%
)	(		
*	(		
+	(	&	
,	(	,	<uZZaUb
-	(		

%\$	(		(.
%%	(		
%&	(		
%	(		)
%&	(		*
%@	(		*
%*	(		
%+			
%			



1		12
2	3	12
		24

1		2
2		2
3	哈夫曼编 / 译码器	2
4		2
5		2
6		2
		12

1		12
		12



*EIP-CDIO*

		2			
		3			

fP&

fI&

fI 7

fP&

fI&

fI 7



1  
2  
3

CDIO

%&

&"%%

&"("

("("%

("("'

1  
2  
3

DEBUG

n

m

m

ž ^ ž ž ž  
ž ž ž ž ž  
^ \$ž ^ ž ž  
"

% & ... b b b2\$

a a a a %  
% b '\$

%

&

1  
2

C

C

CDIO

%&

&"%%

&"("

("("%

("('

1.  
2.  
3.  
4.  
5.

DEBUG

C

1

2

N

0

1

2

N

1

M M

0

3

4

---

## 哈夫曼编 / 译码器

1  
2

C

C

CDIO

%&

&"%%

&"("

("("%

("('

1.

2.

3.

C C++

4.

Huffman

5.

. Huffman

L

Huffman

6.

Huffman



% ( )

&"

' "

CDIO

% &

&" % %

&" (" (

(" (" %

(" ("'

%

&"

1. ;

&"

3. ;

4. v ;

5. ;

6. ;

+"

VI

VI

--	--	--

--	--



%

%  
&  
,

CDIO

%&

&"%%

&"("

("("%

("("'

[        ]    n  
  1  
  2  
[        ]

%  
&

C

—

{R[S], R[S+1], R[S+2],..... R[T]},  
R[S]

$$T_{avg}(n) = kn \ln n \quad n \quad K$$

k

--

!!

1.

% %

% &

% '

6)

&" & 78=\$

% % &



&" % %



&" (" (



' " % %



' " % &



(" (" %



(" ("'



3.

' " %



' " &



' " ' "



' " (



4.

("%

- %\$" ("%
- %\$" (" &

5.

)"%

- 

6.

\*"%

- 

\*" &

- %\$" ("% fl                    ȷ
- %\$" (" & fl                    ȷ

\*"'

- 

\*" (

- %\$" ("%
- %\$" (" &

\*")

- 

\*" \*

- 

7.

7.1

- 
- 

7 2

- 
- 

Visual Studio

---

	Visio	Rational Rose
●		
●		
7.3		
●		
7.4		
●		
●		
7.5		
●		
●	302	
●	302	
●	301	
7.6		
●		
●		
7.7		
●		
●		
●		
8.		
8.1		
●		
●		
●		
●		
8.2		

—

—

1.

- ◆
- ◆
- ◆
  
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆
- ◆

2.

- ◆
- ◆
- ◆
  
- ◆
- ◆
- ◆



---

(Unit Test)

3.



1.



10%



30%



30%

80%

10

5

95%



25%



5%

*UML*

*mandays*

*MD*

*0.5MD*



Style Guide

Exception



Unit test



10%



50%

50%



20%

20%

Unit Test



10%

Unit Test



5%

-  
-  
-



5%

-  
-  
-

1.1.1



10%





30%

40%

30%



5% 10%

?



(

)

—

CAD

( )

( )

( )