SEE STUDENTS ACADEMIC PERFORMANCE 2007-2018

SCHOOL OF ELECTRICAL ENGINEERING

PREPARED BY: NGUYEN THI LAN HUONG

Introduction

- HUST adopted the credit-based system since 2009

- Before, most HUST students graduate in June

- Now, we see more and more students graduate in August, December

- Time to graduation seem to fluctuate

- Need to revise student overall academic performance
  - Time to graduate
  - Graduate rate
  - Dropout rate

Data

- Raw data supplied from the Academic Office

- Data structure: Student ID, Semester ID, StatusCode, CPA

- Total number of records analyzed: ~3300 (all majors in SEE, including bachelor programs)

- Number of entrance in each year: Data taken separately by SEE. SEE's account does not have access to students' CPA

Graduate, by year

Year	EE1 no	EE2 no	EE1 average duration	EE2 average duration	EE1 good	EE2 good	EE1 drop	EE2 drop
2012	337	467	4.60	4.54	10	63	52	69
2013	128	297	4.59	4.47	13	47	15	32
2014	38	96	5.20	4.98	3	6	8	14
2015	168	537	4.97	4.68	18	83	22	54
2016	47	199	5.33	4.81	2	27	14	11
2017	96	388	5.29	4.82	2	84	29	21
2018	50	168	5.15	5.07	8	52	14	9

Graduate, by promotion

Promotion	EE1 out	EE2out	EE1 average duration	EE2 average duration	EE1 drop	EE2drop	EE1 good	EE2 good
52	231	254	4.86	4.84	55	60	9	29
53	174	284	4.62	4.50	11	26	1	37
54	141	388	4.94	4.80	12	35	14	48
55	109	336	5.06	5.06	22	40	11	42
56	100	328	4.95	4.66	14	30	10	47
57	71	332	4.77	4.60	24	11	3	61
58	38	230	4.61	4.33	17	8	8	98

Dropout, by promotion – EE1 program

All dropout (all reasons)

EE1				
Entrance	1st year	2nd year	3rd year	>3 years
54		2	3	7
55	2	6	4	10
56	2	5	3	4
57	8	9	3	4
58	13		2	2

Dropout with bad CPA (<=F)

EE1				
Entrance	1st year	2nd year	3rd year	>3 years
54		1	1	
55		4	2	2
56	2	1		
57	4	2	2	
58	8		1	

Dropout, by promotion – EE2 program

All dropout (all reasons)

EE2				
Entrance	1st year	2nd year	3rd year	>3 years
54	1	5	3	26
55		8	5	27
56	7	7	11	4
57		5	4	2
58	4	3		2

Dropout with bad CPA (<=F)

EE2				
Entrance	1st year	2nd year	3rd year	>3 years
54	1	2		
55		3		
56	6	4	1	
57		1	1	
58				

Graduate time vs CPA

Graduate time vs Graduate CPA 2007-2018

$y = -0.2286x + 3.8403$
$R^2 = 0.1666$
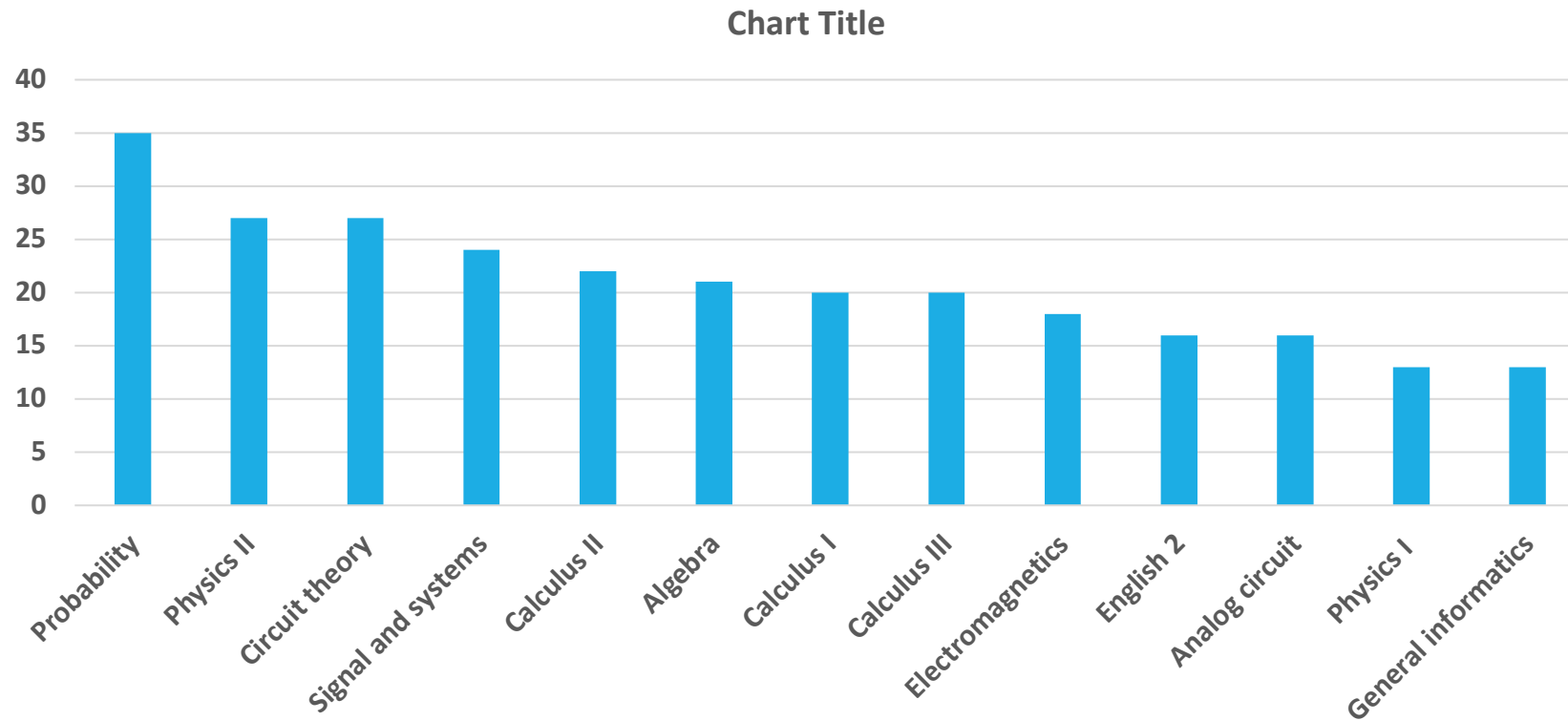
Dropout time vs CPA

Dropout time vs Dropout CPA 2007-2018

Most difficult subjects

Chart Title
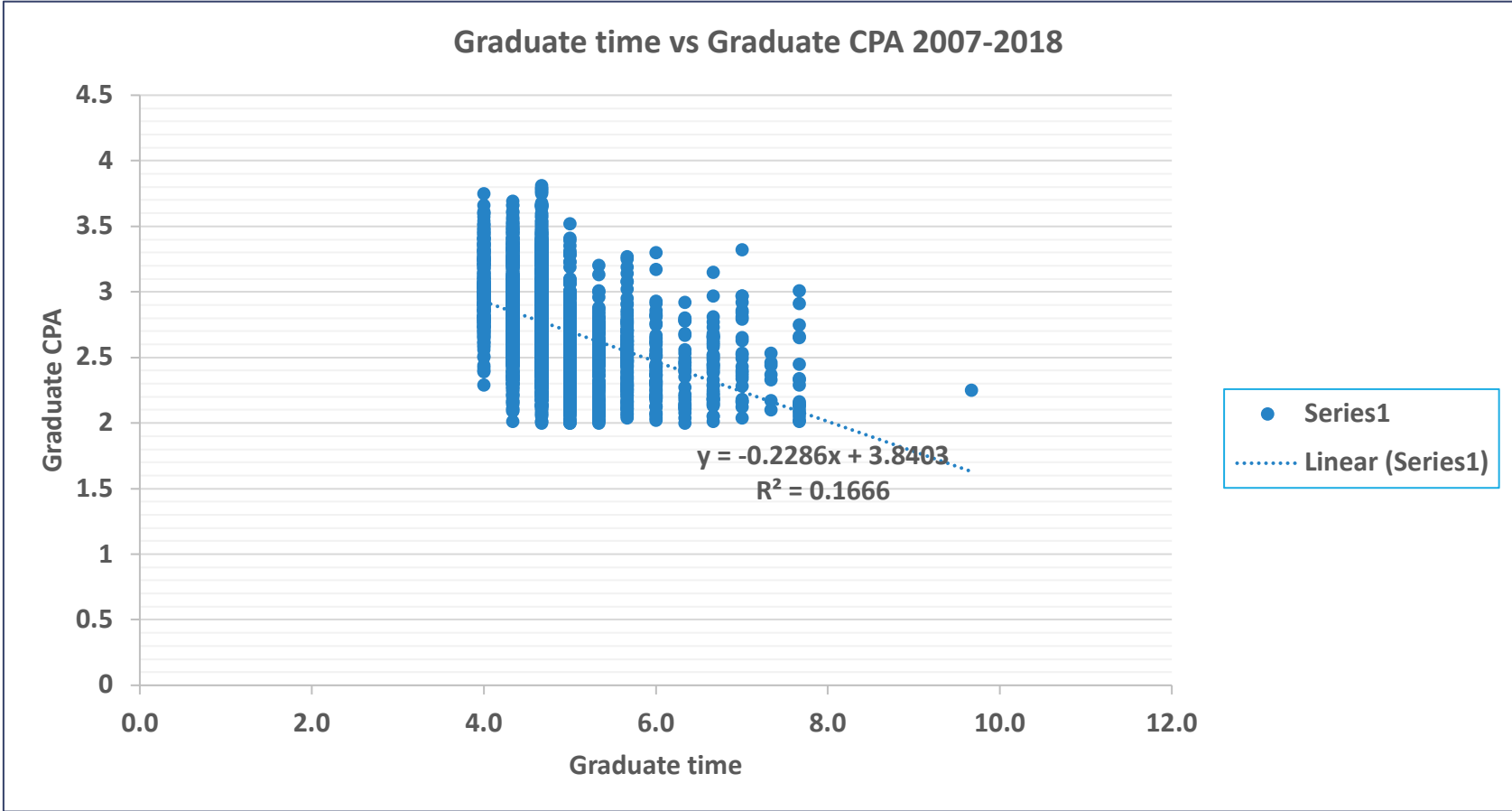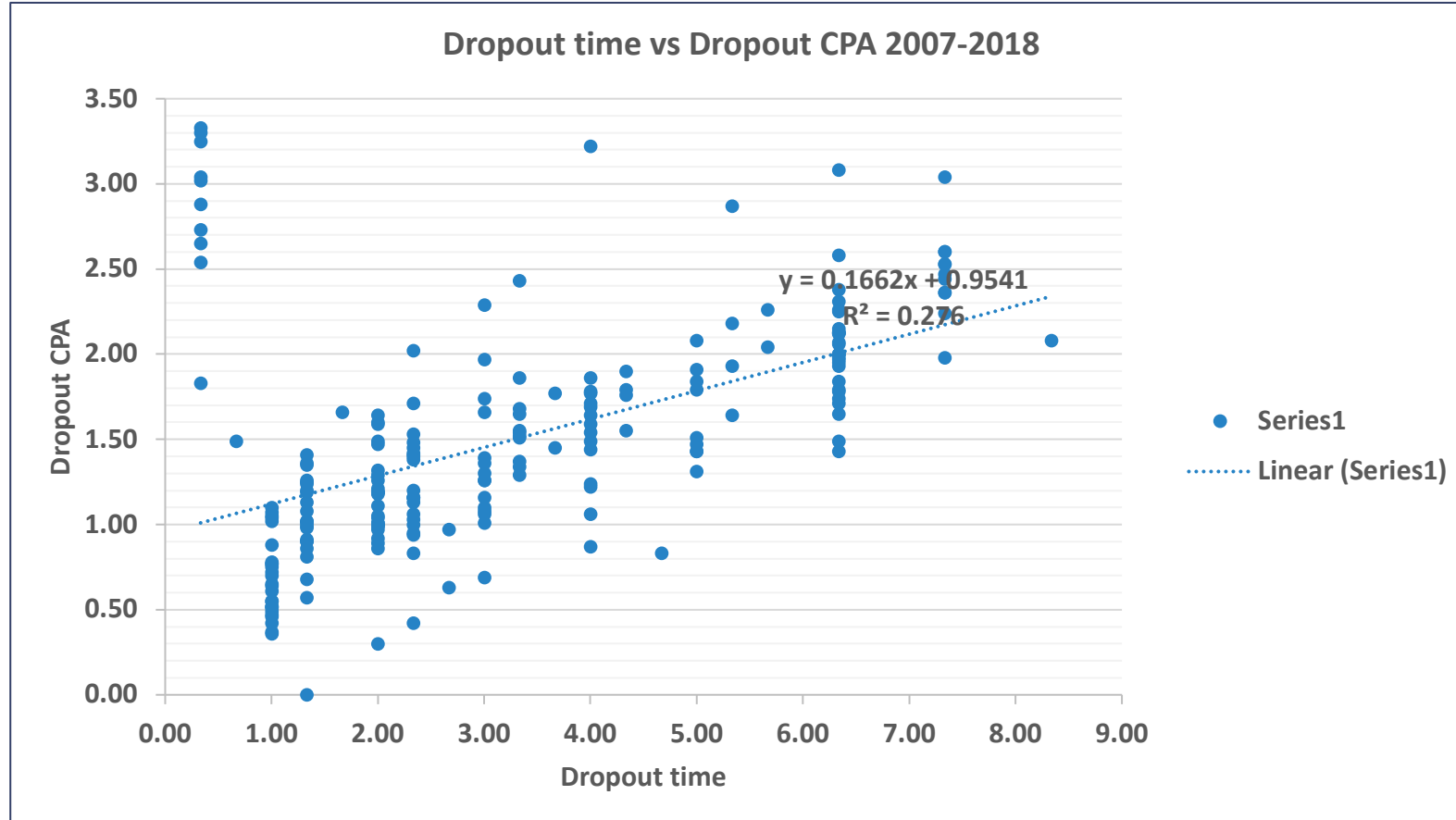
Some conclusion

- Most students graduate on time

- EE2 program has high ratio of good students

- Most students with long graduate time have low CPA (obvious)

- Analysis of dropout
  - Some have very high mark, perhaps these students changed program or went abroad
  - The rest: Reason for dropout mostly because of poor results in the first two years
  - CPA gradually increases with student efforts, but students cannot get out of warning level 3, and end up at the 7.5 year deadline

- Analysis of students on warning level 3: Most difficult subjects are in the first two years. These students need good strategy to reduce warning level.