Responses: 5

PX447 - Module Feedback

Thank you for submitting your feedback on this module - the results will be collated and the information viewed by the module leader and the Education Committee and can help to improve the experience of students taking this module in future.

1 I attended (...?...) of the Lectures

Response	Average	Total
50-80%	40%	2
>80%	60%	3
Total responses to question	100%	5/5

2 The quantity of course material was...

Response	Average	Total
About right	40%	2
Too great	60%	3
Total responses to question	100%	5/5

$\ensuremath{\mathfrak{Z}}$ By the end of the module, its purpose and direction was...

Response	Average	Total
Clear	60%	3
Hazy	40%	2
Total responses to question	100%	5/5

4 Explanation of new terms and concepts was...

Response	Average	Total
Good	20%	1
Adequate	40%	2
Poor	40%	2
Total responses to question	100%	5/5

5 I have a (...?...) set of notes

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Response	Average	Total
No	50%	2
Total responses to question	80%	4/5

11 I found the textbook(s) used to be...

Response	Average	Total
Helpful	50%	2
l did not use a textbook	50%	2
Total responses to question	80%	4/5

12 I found the weekly reflection exercise to be...

Response	Average	Total
Helpful	40%	2
Unhelpful	20%	1
Did not undertake	40%	2
Total responses to question	100%	5/5

13 I found the lecture notes to be...

Response	Average	Total
Very Helpful	40%	2
Helpful	60%	3
Total responses to question	100%	5/5

14 The Exercises and their solutions helped me understand the material

Response	Average	Total
Substantially	40%	2
Moderately	40%	2
Marginally	20%	1
Total responses to question	100%	5/5

15 Reversible classical computation

Response	Average	Total
In the lectures	40%	2
After working on the Exercises	40%	2
After more work	20%	1
Total responses to question	100%	5/5

16 Universal gates for quantum computation

Response	Average	Total
In the lectures	20%	1
After working on the Exercises	40%	2
After more work	40%	2
Total responses to question	100%	5/5

17 Quantum simulation

Response	Average	Total
In the lectures	20%	1
After working on the Exercises	60%	3
After more work	20%	1
Total responses to question	100%	5/5

18 Quantum search

Response	Average	Total
After working on the Exercises	80%	4
After more work	20%	1
Total responses to question	100%	5/5

19 Quantum algorithm for solving linear equations

Response	Average	Total
After working on the Exercises	80%	4
After more work	20%	1

Response	Average	Total
Total responses to question	100%	5/5

20 Quantum Fourier transform

Response	Average	Total
In the lectures	20%	1
After working on the Exercises	60%	3
After more work	20%	1
Total responses to question	100%	5/5

21 Quantum error correction

Response	Average	Total
In the lectures	20%	1
After working on the Exercises	40%	2
After more work	20%	1
Poorly	20%	1
Total responses to question	100%	5/5

The best features of this module were:

question

Respondent	Response
	Quantum algorithms were well explained and exercises complemented material really well to gain a deep understanding on them.
	Engaging lecturing style and thorough typed-notes as well as lots of practice problems
	The regular opportunities to ask questions, and sketches of circuit diagrams and the Bloch sphere etc. helping to visualise concepts.
Total responses to	3/5

23 Any particular aspects/items needing improvement (and suggestions how):

Respondent	Response
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Respondent Response

While the concepts were well explained, the mathematical justifications are often glossed over in lectures. Solutions to exercises were often incomplete with many steps skipped and therefore learning the mathematical techniques was often much slower. This did encourage deep thinking, however it is difficult to commit that much time to one module. The section on quantum error correction was very rushed and the module finished in week 9. Spreading out the same content would have been more benficial.

The explanation of new concepts is often not very clear and the prose used is quite hard to understand.

In some cases I thought it wasn't worth going through all the algebra during lectures - more efficient to jump to the answer and say to do it in the problems.

Speed of delivery was insanely fast. This certainly most be slowed down in future. One possible better use of time to actually write more things out in the lectures to ensure that everyone has the correct understanding before attempting the exercises and working through the proofs independently.

Total responses to question

4/5

24 Any other comments:

Respondent Response

Overall one of the most interesting modules in my degree

The lecturer has a very impressive understanding of this whole subject area, and is also very talented at articulating his words when he answers questions and talks about general topics. The discussions regarding further and real-world applications were very motivating. If the speed of delivery over the technical details was reduced, this would be optimal.

Total responses to question

2/5