

ISOM5240

Deep Learning Business Applications

with Python

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Attendance Requirement

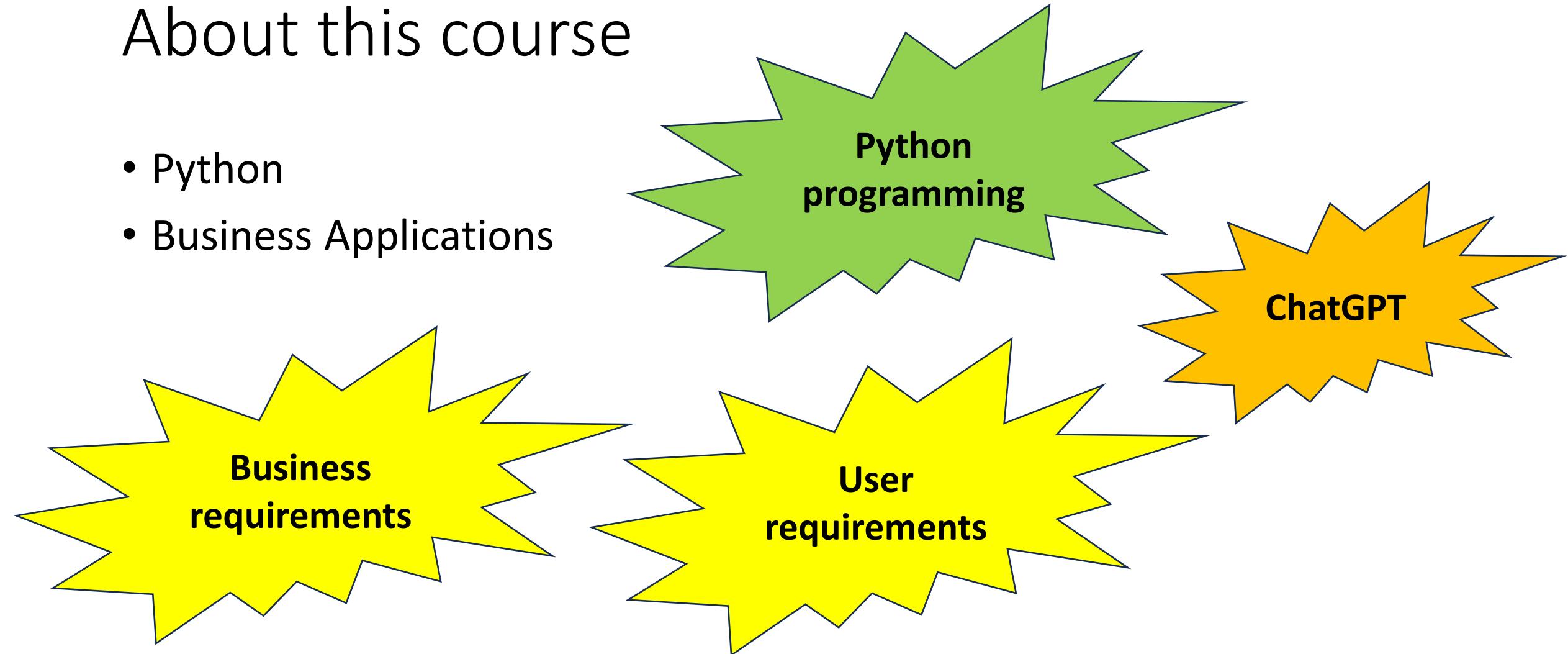
- Attendance at classes is **mandatory** for all courses.
- Students must notify the professor of the course and the HKUST MSBA Program Office **in advance** if they are unable to attend classes.
- Absent with any reason (e.g. sick leave with valid medical proof) will be treated as below:

Absent for	2-credit course (total 8 sessions)
1 st time	Allowed (Program Office will issue warning email to students)
2 nd time	Allowed (One-third grade reduction will be given)
3 rd time	"W" (representing withdrawal from class) will be shown on transcript

- Professors have the discretion to execute a stricter attendance policy at course level.
- Classes will **start on time**.
- Full-time student who are **more than 15 mins late** will be considered **Absent from Class**. Part-time students will be given **30 mins** for the buffer time.
- Students who leave the class early without informing the course instructor and the MSBA Program Office will be considered **absent**.

About this course

- Python
- Business Applications



What this course is about

- Deep learning business applications
 - NLP
- Transfer Learning – Pre-trained models
 - Fine-tuned Models
- Python programming
 - Why Python for deep learning
 - Readability
 - Less complexity
 - Easy to understand the code

Who can benefit from the course?

- Those who want to **develop deep learning business applications & models** that can be **used by other users** who need not be familiar with the model
- Those who want to apply **transfer learning** in business application development
- Those who want to **develop deep learning business applications** which make **tasks easier** for themselves
- Those who want to be aware of the power of Python programming

Important prerequisites for success

Get ready to get your hands dirty

- Learn by doing
 - One **CANNOT** benefit from the course by just **reading lecture materials**
- Learn by yourself (**because you are programmer and developer**)
 - Use google and other resources to learn from others
- Perseverance
 - **Time**
 - **Patience**
- Not scared of programming
 - New to programming: can work with a **partner**, and ask our **TA**

ChatGPT



Logout

ChatGPT

Usage: HK\$ 0.000000 of 8.000000 ⓘ

+ New Chat

Prompt: You are a helpful assistant that answers question as simple as possible.

0 of 20

Enter your question here

0/5000

Fair use and quota:

... a monthly quota of roughly **500 thousand tokens** and a limit of **20 prompts per chat session**

Chat configuration
Please select a model
gpt-35-turbo
Temperature
0.50
0.00 2.00
Maximum response tokens
2000
100 4000
Context templates
Assistant
Context
You are a helpful assistant that answers question as simple as possible.
Looking for help on writing prompts and more examples at <https://prompts.chat/>

<https://chatgpt.ust.hk/>

<https://itsc.hkust.edu.hk/services/general-it-services/generative-ai-tools/help>

ChatGPT



Examples

"Explain quantum computing in simple terms"
→

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Trained to decline inappropriate requests



Limitations

May occasionally generate incorrect information

May occasionally produce harmful instructions or biased content

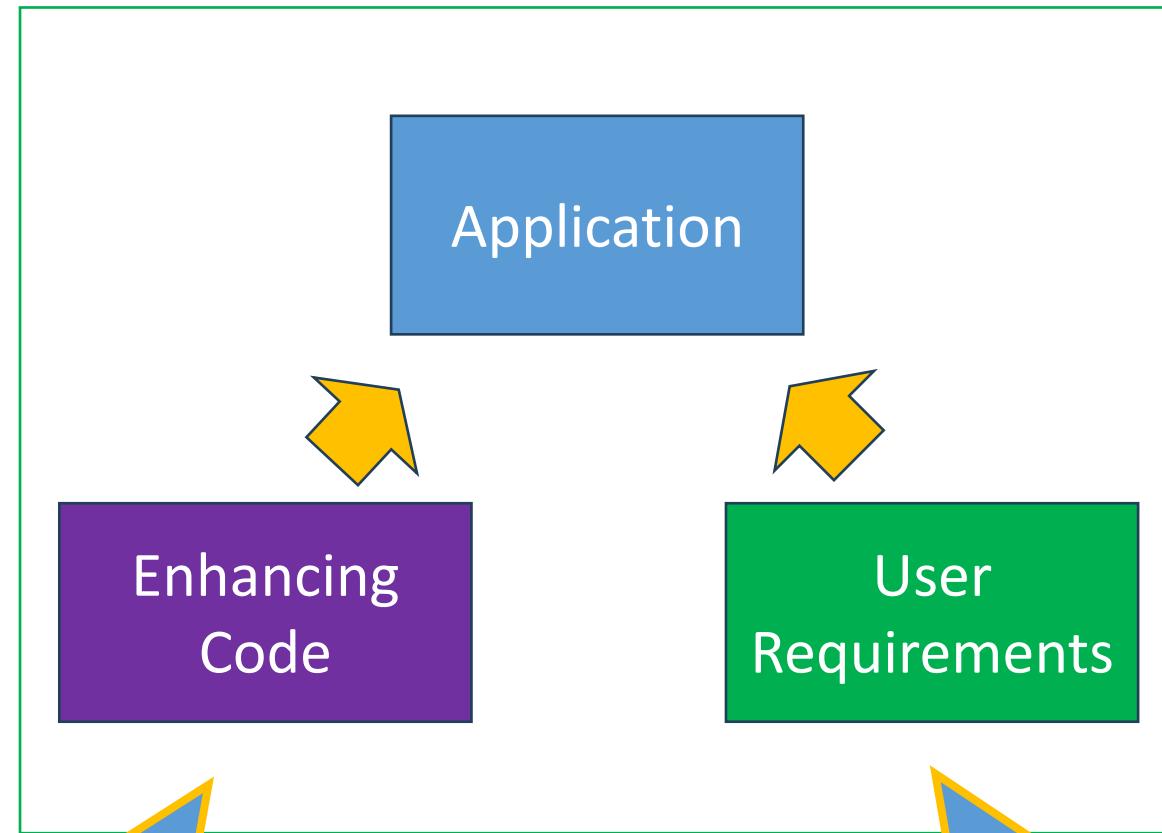
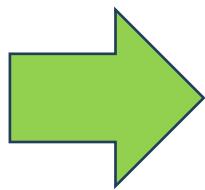
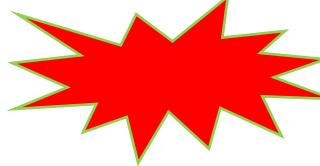
Limited knowledge of world and events after 2021

Send a message

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. [ChatGPT May 24 Version](#)

<https://chat.openai.com/>

Application Development in Python





“Skilled Developers No Need to Worry About ChatGPT”

“ChatGPT is Additional Asset to Developers; Not a Replacement”

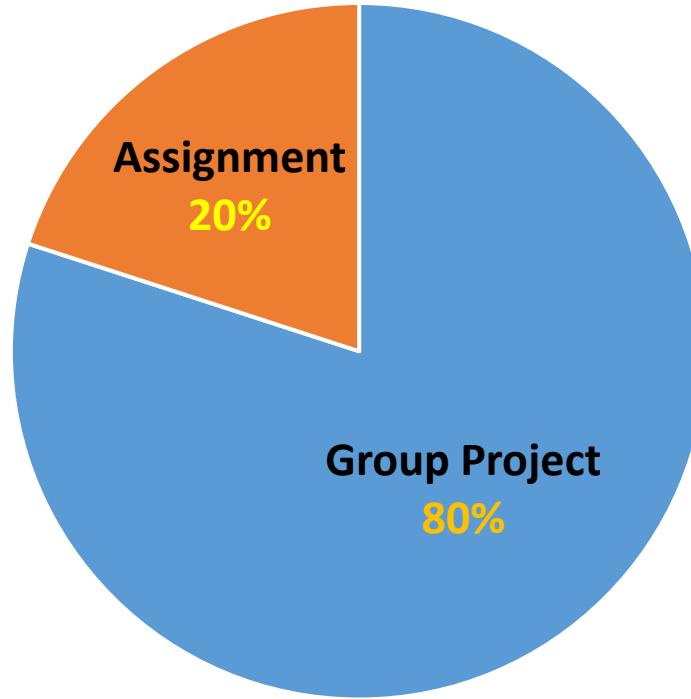
“ChatGPT Can’t Handle Complex Tasks”

“Developers Still Needed for Quality Checking”

“No Tech is Proven to Replace Creativity”

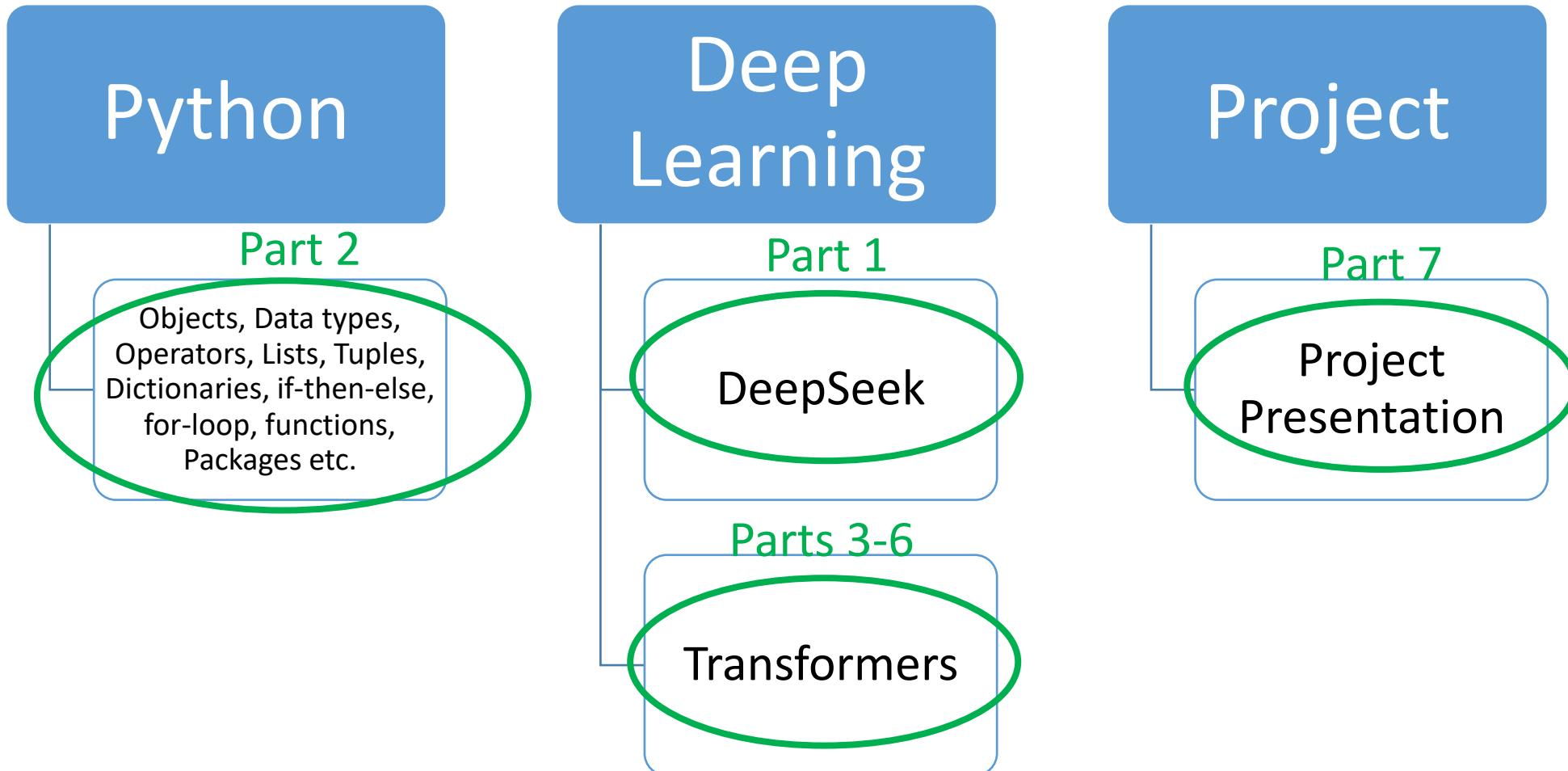
“AI Won’t Steal Your Job; Person Using AI Will”

Grading



- You may work **alone or in a group of two students** for project.
- The submission deadline of lab assignment will be announced during class.
- The topic of project should be discussed with the instructor beforehand.

Course Plan – 7 parts in total



End