ITMO UNIVERSITY

SUMMER CAMP ONLINE

in Competitive Programming 2021

WHEN?

June 21 – July 2, 2021

ECTS?

Yes! 3 ECTS + ITMO Official Certificate

FEES?

22,000 RUB (~ 245€)

APPLICATION DEADLINE?

June 10, 2021

APPLICATION DOCUMENTS?

- Copy of your current passport
- CV
- send to Ms. Ekaterina Rassolenko at e.rassolenko@itmo.ru

REQUIREMENTS?

- Intermediate programming language proficiency (at least 1 language)
- English B1 and higher

REQUIRED PROGRAMS?

- Codeforces, Zoom, IDE for Python, C++ or Java

ITMO UNIVERSITY

SUMMER CAMP ONLINE SCHEDULE

in Competitive Programming 2021

June 21 — July 2, 2021

Date	Topic	Time	Session
JUNE 21 MONDAY	Sorting and Binary Search	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 22 TUESDAY	Dynamic Programming	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 23 WEDNESDAY	Graphs, Depth First Search, Connected Components and Strongly Connected Components	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 24 THURSDAY	Graphs, Shortest Paths, BFS, Dijkstra Algorithms	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 25 FRIDAY	Strings, Prefix-function, Z-function, Hashing	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 28 MONDAY	Segment Tree	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 29 TUESDAY	RMQ, LCA, Sparse Table	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JUNE 30 WEDNESDAY	One topic will be chosen in accordance with students' preferences and skills: ◾ Geometry ◾ Dynamic Programming 2 ◾ Minimum Spanning	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JULY 1 THURSDAY	One topic will be chosen in accordance with students' preferences and skills: ◾ Game Theory, Grundy Theorem, Retroactive Analysis of Cyclic Graphs ◾ Fast Fourier Transform ◾ Suffix Array	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice
JULY 2 FRIDAY	One topic will be chosen in accordance with students' preferences and skills: ◾ Last day contest ◾ Maximum Flow Problem ◾ NP-completeness and Backtracking	11:00 — 13:00	Lecture
		13:00 — 15:00	Practice

All classes are scheduled according to Moscow time (GMT +3).