

## 2023 Osaka University International Certificate Program Details (New/Continuing/Suspension)

14th/Feb/2023

Course Name	Frontiers in Medical Physics and Medical Imaging		
Course Affiliation	Graduate School of Medicine		
Course Manager	Associate Professor, Dousatsu Sakata, Division of Health Science		
Cooperative Schools	Center for Global Initiatives		
Eligibility	<ul style="list-style-type: none"> <li>• Graduate students of ASEAN Campus Partner Universities. (Thailand, Indonesia, Vietnam, Brunei Darussalam and Malaysia)</li> <li>• Working people who have received at least a bachelor's degree from the countries where ASEAN campuses are located.</li> </ul>		
Requirements for completion	6 to 8 credits	Capacity	up to 5
Course Objective	Even in ASEAN countries, the population of elderly people is getting increased and approaching into aging society. Thus, the aim of this course is to develop humanresources who take initiative in leadership for the research/development in the medical physics and medical imaging, in order to deal with the aging society.		
Learning Goals	<p>To understand multidisciplinary basic science across physics, chemistry and biology for radiation therapy.</p> <p>To get prospectives for potential research seeds, catching knowledge that covers the current research topics.</p> <p>To get knowledge of the radiotherapy facilities for further research/development.</p>		
Components	<p><b>【Required Subjects】</b>                  Common Subject (Winter, Spring Term): "Advanced radiation treatment and nuclear medicine" and "Advanced medical imaging", Practical Study Abroad (PSA) Subjects: Select two or three courses in "Laboratory Study I, II, III"  <b>【Elective Subjects】</b>                  "Radiation physics/chemistry, and radiation detection", "Radiobiological effects and radiation treatment", and "Internship I, II, III"</p>		
Requirements	Post-graduate students in science/engineering, or medicine/life-science fields for radiation treatment. Working people in radiation treatment.		
Prior knowledge			
Special Note	All the courses in this program will be given in English. The candidates will be selected through evaluation.		

\*ASEAN Campus Partner Universities

[https://www.osaka-u.ac.jp/en/international/action/asean/asean\\_cci\\_n](https://www.osaka-u.ac.jp/en/international/action/asean/asean_cci_n)

### Components

Course Numbering Code	対象	Course Name	Credits			Course Term	Study Hours	Course Affiliation	Notes
			Common	PSA	Elective				
255676	inbound	Advanced radiation treatment and nuclear medicine	1			winter to spring	15	Graduate school of medicine (master course)	
88A021/88A022	inbound	SDGs and Asia Pacific Region I / II	1			spring to summer	15	International Exchange Subjects (GI)	
88A201	inbound	(PSA) Laboratory study I (SS)		1*		spring to summer	45	International Exchange Subjects (GI)	
88A202	inbound	(PSA) Laboratory study II (SS)		1*		spring to summer	45	International Exchange Subjects (GI)	
88A203	inbound	(PSA) Laboratory study III (SS)		1*		spring to summer	45	International Exchange Subjects (GI)	
255677	inbound	Advanced medical imaging			1	winter to spring	15	Graduate school of medicine (master course)	
255678	inbound	Radiation physics/chemistry, and radiation detection			1	spring to summer	15	Graduate school of medicine (master course)	
255679	inbound	Radiobiological effects and radiation treatment			1	spring to summer	15	Graduate school of medicine (master course)	
255680	inbound	Internship I			0.5	spring to summer	22.5	Graduate school of medicine (master course)	On Site only
255681	inbound	Internship II			0.5	spring to summer	22.5	Graduate school of medicine (master course)	On Site only
255682	inbound	Internship III			0.5	spring to summer	22.5	Graduate school of medicine (master course)	On Site only

\*Participants have to choose two or three PSA courses