## Osaka University International Certificate Program Details

02/19/2025

| Course Name                 | Frontiers in Radiation Therapy and Medical Imaging Technology  |  |  |  |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|--|--|--|--|
| Course Affiliation          | Graduate School of Medicine  |  |  |  |  |  |  |  |  |
| Course Manager              | Associate Professor, Kazumasa Minami, Division of Health Scieince  |  |  |  |  |  |  |  |  |
| Cooperative Schools         | Institute for International Initiatives  |  |  |  |  |  |  |  |  |
| Eligibility                 | • Graduate students of ASEAN Campus Partner Universities. (Thailand, Indonesia, Vietnam, Brunei Darussalam and Malaysia) • Working people who have received at least a bachelor's degree from the countries where ASEAN campuses are located.  |  |  |  |  |  |  |  |  |
| Requirements for completion | more than six credits and less than eight credits Capacity 5   |  |  |  |  |  |  |  |  |
| Course Objective            | Even in ASEAN countries, the population of elderly people is getting inclreased 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 radiation therapy and medical imaging technology, in order to deal with the aging society.   |  |  |  |  |  |  |  |  |
| Learning Goals              | To understand multidisciplinary basic science across physics, chemistry and biology for radiation therapy. To get prospectives for potential research seeds, catching knowledge that covers the current research topics. To get knowledge of the radiotherapy facilities for further research/development.   |  |  |  |  |  |  |  |  |
| Components                  | [Required Subjects] Common Subject (Winter, Spring Term): "Advanced radiation treatment and nuclear medicine" and "Advanced medical imaging", Practical Study Abroad (PSA) Subjects: Select two or three cources in "Laboratory Study I,II,III" [Elective Subjects] "Radiation physics/chemistry, and radiation detection", "Radiobiological effects and radiation treatment", and "Internship I,II,III" |  |  |  |  |  |  |  |  |
| Requirements                | Post-graduate students in science/engineering, or medicine/life-science fields for radiation treatment.<br>Working people in radiation treatment.  |  |  |  |  |  |  |  |  |
| Prior knowledge             |  |  |  |  |  |  |  |  |  |
| Special Note                | All the courses in this program will be given in English. The candiates will be selected through evaluation.   |  |  |  |  |  |  |  |  |

\*ASEAN Campus Partner Universities https://www.osaka-u.ac.jp/en/international/action/asean

| Course<br>Numbering Cate<br>Code | Cate-gory | Course Name  | Credits |     | -             | Course Term      | Study | Course Affiliation   | Notes        |
|----------------------------------|-----------|--|---------|-----|---------------|------------------|-------|--|--------------|
|                                  |           |  | Common  | PSA | Elec-<br>tive | 334, 30 101111   | Hours | Odd 60 All I I I de la | Hotos        |
| 255676                           | common    | Advanced radiation treatment and nuclear medicine    | 1       |     |               | winter to spring | 15    | Graduate school of medicine(master course)                 |              |
| 88A022                           | common    | SDGs and Asia Pacific Region II                      | 1       |     |               | spring to summer | 15    | Institute for International Initiatives                    |              |
| 88A201                           | common    | (PSA) Laboratory study I (SS)                        |         | 1*  |               | spring to summer | 45    | Institute for International Initiatives                    |              |
| 88A202                           | common    | (PSA) Laboratory study II(SS)                        |         | 1*  |               | spring to summer | 45    | Institute for International Initiatives                    |              |
| 88A203                           | common    | (PSA) Laboratory study III(SS)                       |         | 1*  |               | spring to summer | 45    | Institute for International Initiatives                    |              |
| 255677                           | common    | Advanced medical imaging                             |         |     | 1             | winter to spring | 15    | Graduate school of medicine(master course)                 |              |
| 255678                           | common    | Radiation physics/chemistry, and radiation detection |         |     | 1             | spring to summer | 15    | Graduate school of medicine(master course)                 |              |
| 255679                           | common    | Radiobiological effects and radiation treatment      |         |     | 1             | spring to summer | 15    | Graduate school of medicine(master course)                 |              |
| 255680                           | common    | Internship I   |         |     | 0. 5          | spring to summer | 22. 5 | Graduate school of medicine(master course)                 | On Site only |
| 255681                           | common    | Internship II  |         |     | 0. 5          | spring to summer | 22. 5 | Graduate school of medicine(master course)                 | On Site only |
| 255682                           | common    | Internship III                                       |         |     | 0. 5          | spring to summer | 22. 5 | Graduate school of medicine(master course)                 | On Site only |

<sup>\*</sup>Participants have to choose two or three PSA courses