

**Curso 3** – Estimativas de biomassa florestal com sensoriamento remoto e modelagem do ciclo do carbono para serviços REDD+ (*Estimating forest biomass with remote sensing and carbon cycle modeling for REDD + services.*)

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**Idioma:** Inglês

**Vagas:** 30

**Natureza:** teórico/prático (A parte prática consiste em exercícios e demonstrações feitos somente pelo Professor. Não serão fornecidos computadores para os alunos. O aluno que desejar pode levar o seu próprio laptop.)

**Abstract:** Estimating forest biomass and its uncertainty are core requirements for gaining carbon credits under practices related to the Reduced Emissions from Deforestation and forest Degradation (REDD+) framework. Following REDD+ guidelines and protocol, projects qualify for a higher number of carbon credits as uncertainty is reduced, with the lowest uncertainty achieved by Tier 3 projects. Tier 3 projects require a calibrated carbon cycle modeling approach that integrates forest inventory, remote sensing and carbon cycle modeling to estimate carbon stocks for a variety of forest carbon pools. This short course will present state-of-art tools and methodology currently being developed to estimate forest biomass for REDD+ projects. The course will include presentations related to REDD+ project design principles, new radar and optical remote sensing approaches for estimating forest biomass and stand structure, modeling forest carbon dynamics, and economic aspects and issues related to uncertainty. The presentations will be given by partners who are working together in a European Union funded Climate KIC initiative related to designing REDD+ projects and services. The topics are aimed to a broad audience interested in linking carbon policy, remote sensing techniques, carbon cycle modeling, and forest economics, and the challenges and opportunities posed by interdisciplinary research.